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## EDITORIAL NOTE

THERE are objections, not purely pedantic, to using the word 'crisis' to describe a long-drawn out economic and political situation, but the word is part of the jargon of our time. One aspect of the crisis is that it has increased the supply, and possibly the demand, for sermons. And these sermons come to an increasing degree either from the universities direct, or from the more donnish type of politician, the type of which Sir Stafford Cripps is the most important representative. It is, on the whole, academically minded people who provide most of the relevant political controversy, and one of the national problems is that of getting across to the man in the street (including many members of the House of Commons) certain realities of our position that, in the academic world, are taken for granted.

There is always a danger in preaching; there is the danger of smugness, of too easy moral superiority, of the 'don't do as I do, do as I tell you' attitude that, in other times and places, has been a fault popularly imputed to the clergy, and is certainly a serious fault in any kind of clerk. As the crisis will last for a long time to come, we may expect our audience to grow restive and to wonder loudly whether the universities, and especially the ancient universities, are not themselves as much in need of overhauling and adjustment to the needs of our iron age as coal-mining, the Bank of England, the B.B.C. or the football pools.

At first sight, the universities are in an especially favoured position. His Majesty's Government is pouring out money for higher academic purposes on an unprecedented scale. We are asked to see in the American universities, their number and wealth, a main cause of American prosperity, though these often naive comparisons usually come from people with little first-hand knowledge of American academic life, and with little understanding of the ambiguity of the terms 'college' and 'university' in America. The Labour party has traditionally been a party ready to spend public money more lavishly on education than were its rivals, and there is no sign of any change of heart in the higher direction of the party. But in these hard times, hearts may remain unchanged while policy is profoundly altered. We may be told that we have more money than we need, or than the country can afford, and that in any case we don't spend it on the right things, and that our freedom to spend it should be curtailed. The government is more and more the payer of the piper and will be tempted to call the tune.

We must remember that the economic freedom of our universities is more and more of an anomaly. The destruction of the voluntary hospital system, like the nationalisation of coal and transport, are all

signs of the times, signs of the gathering of the power of control into fewer hands. Already the financial autonomy of the universities, especially of Oxford and Cambridge, is an anomaly, and what may soon seem an indefensible or, at any rate, irritating anomaly, like the university franchise. Nor is it self-evidently true that a university need have the financial powers that we have. The French universities do not have it, neither do the American state universities; and in the great endowed American universities the control of the university finances is not in the hands of the teachers. Without going so far as Cecil Rhodes in his views of the financial talents of dons, it may be suspected that a few horrible examples could be found in Oxford and Cambridge that would give zealous reformers an excuse for attacking that autonomy. And of course there are other anomalies that could be worked up, that would be rather hard to defend or even to explain to a visitor from Mars, or to an indignant statesman — or demagogue. As institutions exempt from the rigorous controls imposed on all other public or semi-public bodies; as landowners and mortgage holders in an age of hostility to such old forms of economic organisation we are vulnerable, the more that Blenheim and Woburn are not more than shadows of their past and will not distract attention from Magdalen and King's.

We must remember, too, that this debate will be carried on before a formally literate electorate whose favourite reading is not the Bible or *Capital* but the *News of the World*. There is still some reverence for book-learning even in the classes to whom a 'book' is a magazine. But it is not what it was. There is, and will remain, a superstitious awe of applied science. But the academic virtues on which we pride ourselves and whose fostering is the ground on which we claim our immunities and franchises are neither understood nor appreciated in the great outside world that has to pay for us. Academic objectivity may seem tepid Laodiceanism to the zealot; the large leisure (as the outsider sees it) that we defend as the condition of thought and research, the wide tolerance of eccentricity in intellectual taste, not to speak of incompetence and idleness, may all be made to seem something intolerable to a disciplined and jealous society.

The independence of the universities is, of course, more important than ever just because other sources of independent power are getting fewer and fewer. It may be the business of the clerks to be very troublesome at the risk of a new version of the Constitutions of Clarendon. But it is not too late, and certainly not too early, to consider what are our basic needs, not merely financial but institutional, and if the day comes when we have to fight for what we think to be our rights, it is desirable that we should have as few remediable anomalies and real or apparent abuses to explain away as is possible in a world of fallible men and defective institutions. D. W. BROGAN



RATIONALISM IN POLITICS<sup>1</sup>

MICHAEL OAKESHOTT

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It was, of course, improbable that politics should altogether escape the impress of so strong and energetic an intellectual style as that of the new Rationalism. But what, at first sight, is remarkable is that politics should have been earlier and more fully engulfed by the tidal wave than any other human activity. The hold of Rationalism upon most departments of life has varied in its firmness during the last four centuries but in politics it has steadily increased and is stronger now than at any earlier time. We have considered already the general intellectual disposition of the Rationalist when he turns to politics; what remains to be considered are the circumstances in which European politics came to surrender so completely to the Rationalist and the results of the surrender.

That all contemporary politics are deeply infected with Rationalism will be denied only by those who choose to give the infection another name. Not only are our political vices rationalistic, but so also are our political virtues. Our projects are, in the main, rationalist in purpose and character; but, what is more significant, our whole attitude of mind in politics is similarly determined. And those traditional elements, particularly in English politics, which might have been expected to continue some resistance to the pressure of Rationalism, have now almost completely conformed to the prevailing intellectual temper, and even represent this conformity to be a sign of their vitality, their ability to move with the times. Rationalism has ceased to be merely one style in politics and has become the stylistic criterion of all respectable politics.

How deeply the rationalist disposition of mind has invaded our political thought and practice is illustrated by the extent to which traditions of behaviour have given place to ideologies, the extent to which the politics of creation have been substituted for the politics of growth, the consciously planned and deliberately executed being considered (for that reason) better than what has grown up and established itself unselfconsciously over a period of time. This conversion of habits of behaviour, adaptable and never quite fixed or finished, into comparatively rigid systems of abstract ideas, is not, of course, new; so far as England is concerned it was begun in the

<sup>1</sup> The first part of this contribution, of which this is the conclusion, appeared in the November issue of THE CAMBRIDGE JOURNAL.

seventeenth century, in the dawn of rationalist politics. But, while formerly it was tacitly resisted and retarded by, for example, the informality of English politics (which enabled us to escape, for a long time, putting too high a value on political action and placing too high a hope in political achievement — to escape, in politics at least, the illusion of the evanescence of imperfection), that resistance has now itself been converted into an ideology.<sup>1</sup> This is, perhaps, the main significance of Hayek's *Road to Serfdom* — not the cogency of his doctrine, but the fact that it is a doctrine. A plan to resist all planning may be better than its opposite, but it belongs to the same style of politics. And only in a society already deeply infected with Rationalism will the conversion of the traditional resources of resistance to the tyranny of Rationalism into a self-conscious ideology be considered a strengthening of those resources. It seems that now, in order to participate in politics and expect a hearing, it is necessary to have, in the strict sense, a doctrine; not to have a doctrine appears frivolous, even disreputable. And the sanctity, which in some societies was the property of a politics piously attached to traditional ways, has now come to belong exclusively to rationalist politics.

Rationalist politics, I have said, are the politics of the felt need, the felt need not qualified by a genuine, concrete knowledge of the permanent interests and direction of growth of a society, but interpreted by reason and satisfied according to the technique of an ideology: they are the politics of the book. And this, also, is characteristic of almost all contemporary politics: not to have a book is to be without the one thing necessary, and not to observe meticulously what is written in the book is to be a disreputable politician. Indeed, so necessary is it to have a book, that those who have hitherto thought it possible to get on without one, have had, rather late in the day, to set about composing one for their own use. This is a symptom of the triumph of technique which we have seen to be the root of modern Rationalism; for what the book contains is only what it is possible to put into a book — the rules of a technique. And, book in hand (because, though a technique can be learned by rote, they have not always learned their lesson well) the politicians of Europe pore over the simmering banquet they are preparing for the future; but, like jumped-up kitchen-porters deputising for an absent cook, their knowledge does not extend beyond the written word — they have no taste.

Among the other evidences of Rationalism in contemporary politics, may be counted the commonly admitted claim of the scientist as such (the chemist, the physicist, the economist or the psychologist)

<sup>1</sup> A tentative, and therefore not a fundamentally damaging, conversion of this sort was attempted by the first Lord Halifax.

to be heard in politics; because, though the knowledge involved in a science is always more than technical knowledge, what it has to offer to politics is never more than a technique. And under this influence, the intellect in politics ceases to be the critic of political habit and becomes a substitute for habit, and the life of a society loses its rhythm and continuity and is resolved into a succession of problems and crises. Folk-lore, because it is not technique, is identified with nescience, and all sense of what Burke called the partnership between present and past is lost.<sup>1</sup>

There is, however, no need to labour the point that the most characteristic thing about contemporary politics is their rationalist inspiration; the prevailing belief that politics are easy is, by itself, evidence enough. And if a precise example is required we need look no further for it than the proposals we have been offered for the control of the manufacture and use of atomic energy. The rationalist faith in the sovereignty of technique is the presupposition both of the notion that some over-all scheme of mechanised control is possible and of the details of every scheme that has so far been projected. But, if Rationalism now reigns almost unopposed, the question which concerns us is, What are the circumstances that promoted this state of affairs? For the significance of the triumph lies not merely in itself, but in its context.

Briefly, the answer to this question is that the politics of Rationalism are the politics of the politically inexperienced, and that the outstanding characteristic of European politics in the last four centuries is that they have suffered the incursion of at least three types of political inexperience — that of the new ruler, of the new ruling class, and of the new political society — to say nothing of the incursion of a new sex, lately provided for by Mr. Shaw. How appropriate rationalist politics are to the man who, not brought up or educated to their exercise, finds himself in a position to exert political initiative and power, requires no emphasis. His need of it is so great, that he will have no incentive to be sceptical about the possibility of a magic technique of politics which will remove the handicap of his lack of political education. The offer of such a technique will seem to him the offer of salvation itself; to be told that the necessary knowledge is to be found, complete and self-contained, in a book, and to be told that this knowledge is of a sort that can be learned by heart quickly and applied mechanically, will seem, like salvation, something almost too good to be true. And yet it was this, or something near enough to be mistaken for it, which he understood Bacon and Descartes to be offering him. For, though neither of these writers ventures upon the detailed application of his method to politics, the

<sup>1</sup> An imaginative study of the politics of Rationalism is to be found in Rex Warner's book, *The Aerodrome*.

intimations of rationalist politics are present in both, qualified only by a scepticism which could easily be passed over. Nor had he to wait for Bacon and Descartes (to wait, that is, for a general doctrine of Rationalism); the first of these needy adventurers into the field of politics was provided for on his appearance a century earlier by Machiavelli.

It has been said that the project of Machiavelli was to expound a science of politics, but this, I think, misses the significant point. A science, we have seen, is concrete knowledge and consequently neither its conclusions nor the means by which they were reached can ever, as a whole, be written down in a book; neither an art nor a science can be imparted in a set of directions. But what can be imparted in this way is a technique, and it is with the technique of politics that Machiavelli, as a writer, is concerned. He wrote for the new prince of his day, and this for two reasons, one of principle and the other personal. The well-established hereditary ruler, educated in a tradition and heir to a long family experience, seemed to be well enough equipped for the position he occupied; his politics might be improved by a correspondence course in technique, but in general he knew how to behave. But with the new ruler, who brought to his task only the qualities which had enabled him to gain political power and who learnt nothing easily but the vices of his office, the *caprice de prince*, the position was different. Lacking education (except in the habits of ambition), and requiring some short-cut to the appearance of education, he required a book. But he required a book of a certain sort; he needed a crib: his inexperience prevented him from tackling the affairs of state unseen. Now, the character of a crib is that its author must have an educated man's knowledge of the language and that he must prostitute his genius (if he has any) as a translator, and that it is powerless to save the ignorant reader from all possibility of mistake. The project of Machiavelli was, then, to provide a crib to politics, a political training in default of a political education, a technique for the ruler who had no tradition. He supplied a demand of his time; and he was personally and temperamentally interested in supplying the demand because he felt the 'fascination of what is difficult'. The new ruler was more interesting because he was far more likely than the educated hereditary ruler to get himself into a tricky situation and to need the help of subtle advice. But, like the great progenitors of Rationalism in general (Bacon and Descartes), Machiavelli was aware of the limitations of technical knowledge; it was not Machiavelli himself, but his followers, who believed in the sovereignty of technique. And to the new prince he offered not only his book, but also, what would make up for the inevitable deficiencies of his book — himself: he never lost the sense that politics, after all, are diplomacy, not the application of a technique.

The new and politically inexperienced social classes which, during the last four centuries, have risen to the exercise of political initiative and power, have been provided for in the same sort of way as Machiavelli provided for the new prince of the sixteenth century. None of these classes had time to acquire a political education before it came to power; each needed a crib, a political doctrine to take the place of a habit of political behaviour. Some of these writings are genuine works of political vulgarisation; they do not altogether deny the existence or value of a political tradition (they are written by men of real political education), but they are abridgements of a tradition, rationalisations purporting to abstract the truth of a tradition and to exhibit it in a set of principles, but from which, nevertheless, the full significance of the tradition inevitably escapes. This is pre-eminently so of Locke's *Second Treatise on Government*, which was as popular and as long-lived a political crib, as that greatest of all cribs to a religion, Paley's *Evidences of Christianity*. But there are other writers, like Bentham or Godwin, who, pursuing the common project of providing for the political inexperience of succeeding generations, cover up all trace of the political habit and tradition of their society with a purely speculative idea: these belong to the strictest sect of Rationalism. But, so far as influence is concerned, nothing in this field can compare with the work of Marx and Engels. European politics without these writers would still have been deeply involved in Rationalism, but beyond question they are the authors of the most stupendous of our political rationalisms — as well they might be, for it was composed for the instruction of a less politically educated class than any other that has ever come to exercise political power. And no fault can be found with the mechanical manner in which this greatest of all political cribs has been learned and used by those for whom it was written. No other technique has so imposed itself upon the world as if it were concrete knowledge; none has created so vast an intellectual proletariat, with nothing but its technique to lose.<sup>1</sup>

The early history of the United States of America is an instructive chapter in the history of the politics of Rationalism. The situation of a society called upon without much notice to exercise political initiative on its own account is similar to that of an individual or a social class rising not fully prepared to the exercise of political power; in general, its needs are the same as theirs. And the similarity is even closer when the independence of the society concerned begins

<sup>1</sup> By casting his technique in the form of history, Marx thought he had escaped from Rationalism; but since he had taken the precaution of first turning history into a doctrine, the escape was an illusion. Like Midas, the Rationalist is always in the unfortunate position of not being able to touch anything without transforming it into an abstraction; he can never get a square meal of experience.



with an admitted illegality, a specific and express rejection of a tradition, which consequently can be defended only by an appeal to something which is itself thought not to depend upon tradition. Nor, in the case of the American colonists, was this the whole of the pressure which forced their revolution into the pattern of Rationalism. The founders of American independence had both a tradition of European thought and a native political habit and experience to draw upon. But, as it happened, the intellectual gifts of Europe to America (both in philosophy and religion) had, from the beginning, been predominantly rationalistic; and the native political habit, the product of the circumstances of colonisation, was what may be called a kind of natural and unsophisticated rationalism. A plain and unpretending people, not given over-much to reflection upon the habits of behaviour they had in fact inherited, who, in frontier communities, had constantly the experience of setting up law and order for themselves by mutual agreement, were not likely to think of their arrangements except as the creation of their own unaided initiative; they seemed to begin with nothing, and to owe to themselves all that they had come to possess. A civilisation of pioneers is, almost unavoidably, a civilisation of self-consciously self-made men, Rationalists by circumstance and not by reflection, who need no persuasion that knowledge begins with a *tabula rasa* and who regard the free mind, not even as the result of some artificial Cartesian purge, but as the gift of Almighty God, as Jefferson said.

Long before the Revolution, then, the disposition of mind of the American colonists, the prevailing intellectual character and habit of politics, were rationalistic. And this is clearly reflected in the constitutional documents and history of the individual colonies. And when these colonies came 'to dissolve the political bands which had connected them with one another', and to declare their independence, the only fresh inspiration that this habit of politics received from the outside was one which confirmed its native character in every particular. For the inspiration of Jefferson and the other founders of American independence was the ideology which Locke had distilled from the English political tradition. They were disposed to believe, and they believed more fully than was possible for an inhabitant of the Old World, that the proper organisation of a society and the conduct of its affairs were based upon abstract principles, and not upon a tradition which, as Hamilton said, had 'to be rummaged for among old parchments and musty records'. These principles were not the product of civilisation; they were natural, 'written in the whole volume of human nature'.<sup>1</sup> They were to be discovered in nature by

<sup>1</sup> There is no space here to elucidate the exceedingly complicated connections between the politics of 'reason' and the politics of 'nature'. But it may be observed that, since both reason and nature were opposed to civilisation, they

human reason, by a technique of inquiry available alike to all men and requiring no extraordinary intelligence in its use. Moreover, the age had the advantage of all earlier ages because, by the application of this technique of inquiry, these abstract principles had, for the most part recently, been discovered and written down in books. And by using these books, a newly made political society was not only not handicapped by the lack of a tradition, but had a positive superiority over older societies not yet fully emancipated from the chains of custom. What Descartes had already perceived, 'que souvent il n'y a pas tant de perfection dans les ouvrages composés de plusieurs pièces et faits de la main de divers maîtres qu'en ceux auxquels un seul a travaillé', was freshly observed in 1777 by John Jay — 'The Americans are the first people whom Heaven has favoured with an opportunity of deliberating upon, and choosing the forms of government under which they should live. All other constitutions have derived their existence from violence or accidental circumstances, and are therefore probably more distant from their perfection . . .' The Declaration of Independence is a characteristic product of the *saeculum rationalisticum*. It represents the politics of the felt need interpreted with the aid of an ideology. And it is not surprising that it should have become one of the sacred documents of the politics of Rationalism, and, together with the similar documents of the French Revolution, the inspiration and pattern of many later adventures in the rationalist reorganisation of society.

The view I am maintaining is that the ordinary practical politics of European nations have become fixed in a vice of Rationalism, that much of their failure (which is often attributed to other and more immediate causes<sup>1</sup>) springs in fact from the defects of the Rationalist character when it is in control of affairs, and that (since the rationalist disposition of mind is not a fashion which sprang up only yesterday) we must not expect a speedy release from our predicament. It is always depressing for a patient to be told that his disease is almost as old as himself and that consequently there is no quick cure for it, but (except for the infections of childhood) this is usually the case. So long as the circumstances which promoted the emergence of

<sup>1</sup> War, for example. War is a disease to which a rationalist society has little resistance; it springs easily from the kind of incompetence inherent in rationalist politics. But it has certainly increased the hold of the Rationalist disposition of mind on politics, and one of the disasters of war has been the now customary application to politics of its essentially rationalist vocabulary.

began with a common ground; and the 'rational' man, the man freed from the idols and prejudices of a tradition, could, alternatively, be called the 'natural' man. Modern Rationalism and modern Naturalism in politics, in religion and in education, are alike expressions of a general presumption against all human achievement more than about a generation old.



rationalist politics remain, so long must we expect our politics to be rationalist in inspiration.

I do not think that any or all of the writers whom I have mentioned are responsible for our predicament. They are the servants of circumstances which they have helped to perpetuate (on occasion they may be observed giving another turn to the screw), but which they did not create. And it is not to be supposed that they would always have approved of the use made of their books. Nor, again, am I concerned with genuinely philosophical writing about politics; in so far as that has either promoted or retarded the tendency to Rationalism in politics, it has always been through a misunderstanding of its purpose, which is altogether to one side of that of the doctrinaire in politics. To explore the relations between politics and eternity is one thing; it is something different, and less commendable, for a practical politician to find the intricacy of the world of time so unmanageable that he is bewitched by the offer of a quick escape into the bogus eternity of an ideology. Nor, finally, do I think we owe our predicament to the place which natural science has come to take in our civilisation. This simple diagnosis of the situation has been much put about, but I think it is mistaken. That the influence of the genuine natural scientist is not necessarily on the side of Rationalism follows from the view I have taken of the character of any kind of concrete knowledge. No doubt there are scientists deeply involved in the rationalist attitude, but they are mistaken when they think that the rationalist and the scientific points of view necessarily coincide. The trouble is that when the scientist steps outside his own field he carries with him only his technique, and this at once allies him with the forces of Rationalism. In short, I think the great prestige of natural science has, in fact, been used to fasten the rationalist disposition of mind more firmly upon us, but that this is the work, not of the genuine scientist as such, but of the scientist who is a Rationalist in spite of his science.

## 5

To this brief sketch of the character, and the social and intellectual context of the emergence of Rationalism in politics, may be added a few reflections. The generation of rationalist politics is by political inexperience out of political opportunity. These conditions have often existed together in European societies; they did so in the ancient world, and that world at times suffered the effects of their union. But the particular quality of Rationalism in modern politics derives from the circumstance that the modern world succeeded in inventing so plausible a method of covering up lack of political education that even those who suffered from that lack were often left ignorant that they lacked anything. Of course, this inexperience

was never, in any society, universal, and it was never absolute. There have always been men of genuine political education, immune from the infection of Rationalism (and this is particularly so of England, where a political education of some sort has been much more widely spread than in some other societies); and sometimes a dim reminder of the limitations of his technique has penetrated even the mind of the Rationalist. Indeed, so impractical is a *purely* rationalist politics, that the new man, lately risen to power, will often be found throwing away his book and relying upon his general experience of the world as, for example, a business man or a trade union official. This experience is certainly a more trustworthy guide than the book — at least it is real knowledge and not a shadow — but still, it is not a knowledge of the political traditions of his society, which, in the most favourable circumstances, takes two or three generations to acquire. Nevertheless, when he is not arrogant or sanctimonious, the Rationalist can appear a not unsympathetic character. He wants so much to be right. But unfortunately he will never quite succeed. He began too late and on the wrong foot. His knowledge will never be more than half-knowledge, and consequently he will never be more than half-right.<sup>1</sup> Like a foreigner or a man out of his social class, he is bewildered by a tradition and a habit of behaviour of which he knows only the surface; a butler or an observant house-maid has the advantage of him. And he conceives a contempt for what he does not understand; habit and custom appear bad in themselves, a kind of nescience of behaviour. And by some strange self-deception, he attributes to tradition (which, of course, is pre-eminently fluid) the rigidity and fixity of character which in fact belong to ideological politics. Consequently, the Rationalist is a dangerous and expensive character to have in control of affairs, and he does most damage, not when he fails to master the situation (his politics, of course, are always in terms of mastering situations and surmounting crises), but when he appears to be successful; for the price we pay for each of his apparent successes, is a firmer hold of the intellectual fashion of Rationalism upon the whole life of society.

Without alarming ourselves with imaginary evils, it may, I think, be said that there are two characteristics, in particular, of political Rationalism which make it exceptionally dangerous to a society. No sensible man will worry greatly because he cannot at once hit upon a cure for what he believes to be a crippling complaint; but if he sees the complaint to be of a kind which the passage of time (the only healer of social complaints worth considering) must make more

<sup>1</sup> There is a reminiscence here of a passage in Henry James, whose study of Mrs. Headway in *The Siege of London* is the best I know of a person in this position.

rather than less severe, he will have a more substantial cause for anxiety. And this unfortunately appears to be so with the disease of Rationalism.

First, Rationalism in politics, as I have interpreted it, involves an identifiable error, a misconception with regard to the nature of human knowledge, which amounts to a corruption of the mind. And consequently it is without the power to correct its own short-comings; it has no homeopathic quality; you cannot escape its errors by becoming more sincerely or more profoundly rationalistic. This, it may be observed, is one of the penalties of living by the book; it leads not only to specific mistakes, but it also dries up the mind itself. As Donne remarks in one of his letters: 'he who will live by precept shall long be without the habit of honesty'. And further, the Rationalist has rejected in advance the only external inspiration capable of correcting his error; he does not merely neglect the kind of knowledge which would save him, he begins by destroying it. First he turns out the light and then complains that he cannot see, that he is '*comme un homme qui marche seul et dans les ténèbres*'. In short, the Rationalist is essentially ineducable; and he could be educated *out* of his Rationalism only by an inspiration which he regards as the great enemy of mankind. All the Rationalist can do when left to himself is to replace one rationalist project in which he has failed by another in which he hopes to succeed. Indeed, this is what contemporary politics are fast degenerating into: the political habit and tradition which, not long ago, was the common possession of even extreme opponents in English politics, has been replaced by merely a common rationalist disposition of mind.

But, secondly, a society which has embraced a rationalist form of politics will soon find itself either being steered or drifting towards an exclusively rationalist form of education. I do not mean the crude purpose of National Socialism or Communism of allowing no education except a training in the dominant rationalist doctrine, I mean the more plausible project of offering no place to any form of education which is not generally rationalistic in character.<sup>1</sup> And when an exclusively rationalist form of education is fully established, the only hope of deliverance lies in the discovery by some neglected pedant, 'rummaging among old parchments and musty records', of what the world was like before the millenium overtook it.

From the earliest days of his emergence, the Rationalist has taken an ominous interest in education. He has a respect for 'brains', a great belief in training them, and is determined that cleverness shall be encouraged and shall receive its reward of power. But what is this education in which the Rationalist believes? It is certainly not an initiation into the moral and intellectual habits and achievements of

<sup>1</sup> Something of this sort happened in France after the Revolution.

his society, an entry into the partnership between present and past, a sharing of concrete knowledge; for the Rationalist, all this would be an education in nescience, both valueless and mischievous. It is a training in technique, a training, that is, in the half of knowledge which can be learnt from books when they are used as cribs. And the Rationalist's affected interest in education escapes the suspicion of being a mere subterfuge for imposing himself more firmly on society, only because it is clear that he is as deluded as his pupils. He sincerely believes that a training in technical knowledge is the only education worth while, because he is moved by the faith that there is no knowledge, in the proper sense, except technical knowledge.

Now, in a society already largely rationalist in inspiration, there will be a positive demand for training of this sort. Half-knowledge (so long as it is the technical half) will have an economic value; there will be a market for the 'trained' mind. And it is only to be expected that this demand will be satisfied; books of the appropriate sort will be written and sold in large quantities, and institutions offering a training of this kind (either generally or in respect of a particular activity) will spring up.<sup>1</sup> And so far as our society is concerned, it is now long since the exploitation of this demand began in earnest; it was already observed in the early nineteenth century. But it is not very important that people should learn the piano or how to manage a farm by a correspondence course; and in any case it is unavoidable in the circumstances. What is important, however, is that the rationalist inspiration has now invaded and has begun to corrupt the genuine educational provisions and institutions of our society: some of the ways and means by which, hitherto, a genuine (as distinct from a merely technical) knowledge has been imparted have already disappeared, others are obsolescent, and others again are in process of being corrupted from the inside. The whole pressure of the circumstances of our time is in this direction. Apprenticeship, the pupil working along-side the master who in teaching a technique also imparts the sort of knowledge that cannot be taught, has not yet disappeared; but it is obsolescent, and its place is being taken by technical schools whose training (because it can be a training only in technique) sticks in the teeth, like a powder which a thoughtless dispenser has forgotten to suspend in a liquid vehicle before he offers it to the patient. Again, professional education is coming more and more to be regarded as the acquisition of a technique, something that can be done through the post, with the result that we may look for-

<sup>1</sup> Some people regard this as the inevitable result of an industrial civilisation, but I think they have hit upon the wrong culprit. What an industrial civilisation needs is genuine skill; and in so far as our industrial civilisation has decided to dispense with skill and to get along with merely technical knowledge it is an industrial civilisation gone to the bad.

ward to a time when the professions will be stocked with clever men, but men whose skill is limited and who have never had a proper opportunity of learning the *nuances* which compose the tradition and standard of behaviour which belong to a great profession.<sup>1</sup> One of the ways in which this sort of knowledge has hitherto been preserved (because it is a great human achievement, and if it is not positively preserved it will be lost) and transmitted is a family tradition. But the Rationalist never understands that it takes about two generations of practice to learn a profession; indeed, he does everything he can to destroy the possibility of such an education, believing it to be mischievous. Like a man whose only language is Esperanto, he has no means of knowing that the world did not begin in the twentieth century. And the priceless treasure of great professional traditions is, not negligently but purposefully, destroyed in the destruction of so-called vested interests. But perhaps the most serious rationalist attack upon education is that directed against the Universities. The demand for technicians is now so great that the existing institutions for training them have become insufficient, and the Universities are in process of being procured to satisfy the demand. The ominous phrase, 'university trained men and women' is establishing itself, and not only in the vocabulary of the Ministry of Education.

To an opponent of Rationalism these are local, though not negligible, defeats, and, taken separately, the loss incurred in each may not be irreparable. At least an institution has a positive power of defending itself, if it will use it. But there is a victory which the Rationalist has already won on another front from which recovery will be more difficult because, while the Rationalist knows it to be a victory, his opponent hardly recognises it as a defeat. I mean the circumvention and appropriation by the rationalist disposition of mind of the whole field of morality and moral education. The morality of the Rationalist is the morality of the self-conscious pursuit of moral ideals, and the appropriate form of moral education is by precept, by the presentation and explanation of moral principles. This is represented as a higher morality (the morality of the free man: there is no end to the clap-trap) than that of habit, the unselfconscious following of a tradition of moral behaviour; but, in fact, it is merely morality reduced to a technique, to be acquired by training in an ideology rather than an education in behaviour. In morality, as in everything else, the Rationalist aims to begin by getting rid of

<sup>1</sup> The army in wartime was a particularly good opportunity of observing the difference between a trained and an educated man; the intelligent civilian had little difficulty in acquiring the technique of military leadership and command, but (in spite of the cribs provided: *Advice to Young Officers*, etc.) he always remained at a disadvantage beside the regular officer, the man educated in his profession.



inherited nescience and then to fill the blank nothingness of an open mind with the items of certain knowledge which he abstracts from his personal experience, and which he believes to be approved by the common reason of mankind.<sup>1</sup> He will defend these principles by argument, and they will compose a coherent (though morally parsimonious) doctrine. But, unavoidably, the conduct of life, for him, is a jerky, discontinuous affair, the solution of a stream of problems, the mastery of a succession of crises. Like the politics of the Rationalist (from which, of course, it is inseparable), the morality of the Rationalist is the morality of the self-made man and of the self-made society. And it is of no consequence that the moral ideology which inspires him today (and which, if he is a politician, he preaches) is, in fact, the desiccated relic of what was once the unselfconscious moral tradition of an aristocracy who, ignorant of ideals, had acquired a habit of behaviour in relation to one another and had handed it on in a true moral education. For the Rationalist, all that matters is that he has at last separated the ore of the ideal from the dross of the habit of behaviour; and for us, the deplorable consequences of his success. Moral ideals are a sediment; they have significance only so long as they are suspended in a religious or social tradition, so long as they belong to a religious or a social life.<sup>2</sup> The predicament of our time is that the Rationalists have been at work so long on their project of drawing off the liquid in which our moral ideals were suspended (and pouring it away as worthless) that we are left only with the dry and gritty particles of our morality which choke us as we try to take them down. And it is for this reason that, among much else that is corrupt and unhealthy, we have the spectacle of a set of sanctimonious, rationalist politicians, preaching an ideology of unselfishness and social service to a society in which they and their rationalist predecessors have done their best to destroy the only living root of moral behaviour; and opposed by another set of politicians dabbling with the project of converting our society from Rationalism under the inspiration of a fresh rationalisation of our political tradition.

<sup>1</sup> Of this, and other excesses of Rationalism, Descartes himself was not guilty. *Discours de la Méthode*, III.

<sup>2</sup> The absurdity of preaching to the converted is a characteristic rationalist notion; the fact is, of course, that it is no use *preaching* to anyone else.

## THE VERSAILLES SETTLEMENT AND THE FAILURE OF THE LEAGUE

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### 1

EVEN if the historian's verdict could usually — and unhappily — be final, we should be forced to recognise the most recent past as beyond the reach of his normal infallibility; and this would especially apply to the historian of international affairs. The author of a recent book on this period<sup>1</sup> was, of course, aware of this. To a large extent, indeed, it must be admitted that he could afford to ignore it. His book is not a history of international affairs between the two wars and was not intended to be. It is a preliminary essay on a single aspect of the history that, one day, must be written, 'an examination of what people thought and felt about the [Versailles] Settlement at the time and how these ideas changed and developed'.<sup>2</sup> But, when you discuss the development of public opinion on such matters, you cannot avoid taking up your stand with reference to the Government policy of the time. It is not invidious to do this. It is unavoidable; and, therefore, the clearer you can be about your attitude, the better for your readers. Mr. McCallum is as clear about it as could be wished. 'I do not', he says,

anywhere presume to suggest what conduct was right for British Governments to pursue after 1936. From that time onwards everything was on a razor edge . . . Before 1936 there was a system that might have been maintained, the Covenant of the League and the *status quo* in Europe. My one firm thesis is that this was worth maintaining and could have been defended.<sup>3</sup>

That many will support this thesis is without question. It is not so certain that it is historically incontrovertible. For there is a dearth of published official records and the impossibility of separating the analysis of public opinion from an assessment of official policy can therefore create a series of pit-falls and a chain of controversy.

Less controversial now than it once would have been, Mr. McCallum's general approach is squarely based on the view that the verdict passed on the Versailles Settlement has been too severe. 'That Ver-

<sup>1</sup> R. B. MCCALLUM, *Public Opinion and the Last Peace* (O.U.P., 1944, reprinted 1945).

<sup>2</sup> *ibid.* p. vii.

<sup>3</sup> *ibid.* pp. viii-ix.



sailles was harsh is a myth' is now a general opinion. It typifies the inevitable reaction, at the end of another German war, to the sustained and general denunciation of the Settlement between the wars. Such criticism of past denunciation is as easy (and as understandable) as was that denunciation itself. It may be sound; but what is needed before we can be sure is a thorough analysis of the many aspects of the Settlement, now that its history is what might be called complete. Mr. McCallum recognises this, just as he realises that

only if [the Axis Powers] are defeated will such a history be compiled. It is in the nature of such fundamental conflicts that the opportunity to unite their history is one of the prizes of victory. We have a Roman history of the war with Carthage; we have no Carthaginian history of the war with Rome.<sup>1</sup>

These last words should warn us that our analysis must also be as impartial as we can make it.

## 2

If there is one fundamental weakness in Mr. McCallum's argument it is his failure to distinguish between two different aims. These aims are not only different: it would be true to say they conflict to a large extent. They are, on the one hand, his wish to show that the Treaty was not inherently unjust and, on the other, his readiness on all occasions to show that the Treaty was as just as possible, the best practicable treaty in the circumstances. The first aim is understandable in view of his thesis that the Versailles Settlement 'was worth maintaining and could have been defended'. The second is in some respects the result of a confession of failure in the first.

No historian will quarrel with his defence of the authors of the Treaty. His explanation that the inclusion of the war guilt clauses was inevitable in the 'light of the emotions of the time'<sup>2</sup> can be accepted without challenge. Of reparations he says

the question in the end was provided for in the most sensible and statesmanlike manner possible. The Treaty did not pre-judge all the complex and disputatious problems . . . In so far as the peace broke down in the end because of reparations then blame does not attach to the Treaty of Versailles nor to its authors . . . The tragedy was that the French were too slow in revising their expectations.<sup>3</sup>

No historian will dispute that; although it might be pointed out that

<sup>1</sup> *ibid.* pp. 3-4.

<sup>2</sup> *ibid.* p. 108.

<sup>3</sup> *ibid.* p. 48.

the authors of the Treaty must have known the French would take that attitude. In the matter of disarmament, too, it will easily be conceded that 'the statesmen at Paris were, as statesmen usually are, in a dangerous dilemma. They dealt with the problem by ensuring immediate disarmament of Germany and holding out the hope of general disarmament'.<sup>1</sup> It will inevitably be part of the case for the principle of self-determination that 'it was an existing fact before the Conference met . . . [The statesmen were] recognising the facts.'<sup>2</sup> And, so far as the article for the revision of the Covenant is concerned, it must be agreed that 'the charge of insincerity is false if preferred against the principal authors of the Covenant.'<sup>3</sup> The case for the Treaty as the best practicable treaty in the circumstances is well substantiated. It cannot ever have been the subject of much serious doubt for such as choose to see the evidence.

## 3

The real point at issue, however, is the inherent justice of the Treaty, its soundness as the basis of a new *status quo* and of an international system that was worth maintaining.

The justice of the Settlement stands or falls on the war-guilt question. Mr. McCallum's conclusions in arguing this question must now be accepted, as far as they go. Although there are secondary questions of British and French responsibility, there is no doubt that the German and Austrian Governments were responsible for the war breaking out. British diplomacy, more forcefully conducted, could, perhaps, have prevented war. More probably a forceful foreign policy on our part would only have delayed it. All doubt on this question would, as Mr. McCallum suggests, have been removed by a quick German victory in 1914. 'The German Government could hardly then have denied itself the satisfaction of claiming the credit of having made so successful a war, just as Bismarck left posterity in no doubt as to what had been his purposes.'<sup>4</sup>

To censure the German Government is one thing; to censure the whole German people, however, is another. Mr. McCallum notes that those who were adult in England in 1914 never had any doubt of Germany's war guilt. 'They knew. They could remember the deep consternation in the City of London, the grave faces of all responsible citizens as the storm drew nearer.'<sup>5</sup> But it would be unwise to argue that such consternation in England was evidence of Germany's responsibility. Consternation in responsible Berlin was probably equally prevalent. It may well be that German consternation sprang from

<sup>1</sup> *ibid.* p. 64.    <sup>2</sup> *ibid.* p. 79.    <sup>3</sup> *ibid.* p. 128.    <sup>4</sup> *ibid.* p. 103.    <sup>5</sup> *ibid.* p. 108.

different motives;<sup>1</sup> that the German people never, during the war, demanded peace when their armies were victorious; that their reluctance to fight had followed defeat and not preceded it. But there is still the other side: the fact that in the war they had not ruled themselves, the possibility that with the end of the war they had renounced militarism and made a new start. In any just Peace, to ensure a stable Settlement which was worth preserving, should not this possibility have been explored?

It is no answer to this question to reply that it is impracticable or unhistorical to expect such considerations to have been in mind when the Treaty was drawn. A better argument would be that the experience of the past twenty years has made the possibility seem even more remote than it did in the first flush of victory in 1918. As Professor Namier says in his latest book,

an uneasy feeling insinuates itself . . . that Hitler, Goebbels, and Streicher, the Third Reich with its doctrines, power and conquests . . . may not be a gruesome accident or a monstrous aberration, but the correct consummation of the German era in history.<sup>2</sup>

It is the more difficult to quarrel, now, with his analysis of the course of German history and the German mind and outlook. 'The average' he says,

are singularly devoid of individuality . . . They are imitative and unresponsive . . . Rigid quiescence has for centuries been the prevalent style of [their] political life . . . Self-government hardly enters into [their] concept of liberty . . . In politics [they have] proved uncreative and inept: change had to come mostly from outside . . . Unfitted for freedom, they seek release in organised violence . . . [They are] educated but not civilised . . . The typical German is an introvert . . . [His politics are] the work of men with poor human contacts, isolated and tense; who require rigid rules in their intercourse with fellow men . . . [When defeated], from introverse isolation they plunged into the heat and intoxication of undifferentiated, uncritical mass hysteria . . . to hero-worship and adoration of brute force . . . Power is an extension of [their] impoverished and yet inflated ego . . . [they

<sup>1</sup> An experience of 1939 illustrates this point. The writer was in Germany, staying with Germans and visiting the German police daily, owing to the situation, until a few days before the declaration of war. Before the announcement of the German-Soviet pact (August 23rd) German consternation was very great indeed. After the announcement they were overjoyed. They congratulated themselves, and the writer too, that Germany would now be able to settle the Polish question in her own way without any fear of British intervention. As this conviction slowly faded, the consternation reappeared.

<sup>2</sup> L. B. NAMIER, *Facing East* (Hamish Hamilton, 1947), p. 25.

have] a truly remarkable capacity for self-intoxication and self-deception, [an] utter and incurable disregard of facts. . . .<sup>1</sup>

These views are not only Professor Namier's; they are also those of other authorities whose work he was reviewing. It would be unprofitable to seek to undermine their wide acceptance and general validity.

Nor can it be argued in extenuation that Germany, with open frontiers and unfriendly neighbours, required a powerful Executive, a formidable army and a disciplined people more than other countries. The origin of Germany

is not in 'the watch on the Rhine', but in ruthless conquest of weaker neighbours across open frontiers; Italy, with the sea and high mountains for frontier, constantly suffered foreign invasion and rule, but produced Fascism when secure from both; while France, far more often overrun or threatened by enemies than Germany, never resorted to 'Prussianism'. 'Character is fate' is true of nations as much as of individuals.<sup>2</sup>

Whatever its causes, the German problem remains, 'a sinister problem, an enigma of evil',<sup>3</sup> and in politics we have no alternative but to do the best with the materials with which we are presented. If in our internal affairs, 'laws and institutions require to be adapted, not to good men, but to bad',<sup>4</sup> a similar requirement must guide our international arrangements. Difficulties will not be solved by ignoring or belittling them; but neither will they be solved if our analysis of them leads us to stultification and defeatism. There is great danger that this will happen if we look for immediate or Utopian solutions.

The Versailles Treaty presented one opportunity, perhaps the first, of solving the German problem pragmatically, not idealistically or in desperation, by degrees and not in one Utopian swoop or in one final gesture of revenge. The truth about the Settlement as it was effected is not that it was too harsh nor that it was not harsh enough. Inadequate distinction was drawn between the German Government and the German people. The mistake did not lie in the inclusion of the war-guilt clauses, so often since regarded as unwise; but those clauses should have been most clearly limited to the German Government and those responsible for its acts. In both the drawing and the execution of the Treaty confusion on this matter was complete.

At the very beginning, even, there was no clear-cut decision as to whether the Peace was to be a negotiated instrument or whether it

<sup>1</sup> *ibid.* pp. 26-51.

<sup>2</sup> *ibid.*, p. 45.

<sup>3</sup> *ibid.*, p. 26.

<sup>4</sup> J. S. Mill, quoted by K. R. Popper in *The Open Society and Its Enemies*, vol. I p. 225, n2.

was to consist of terms imposed upon Germany. In the clauses themselves the Kaiser was publicly arraigned 'for a supreme offence against international morality and the sanctity of Treaties' (Article 227); but the 'Allied and Associated Governments affirm and Germany accepts the responsibility of Germany for causing all the loss and damage to which [those] Governments and their nations have been subjected as a consequence of the war imposed on them by the aggression of Germany and her allies' (Article 231). This original confusion of outlook on the German problem explains the embarrassing inclusion in the disarmament clauses of the pious hope of eventual equality with Germany in disarmament. Equally, it underlies the failure to provide a more respectful treatment of the new German Government — the Weimar Republic — which, though far from being the ideal liberal state, would seem to have been worth supporting in its limited powers.

The real importance of this fundamental error, however, lies in the effect it had upon the enforcement of the Treaty.<sup>1</sup> The failure to distinguish between the treatment of a defeated state and the treatment of its individual citizens inevitably creates two factions in the victorious countries, those who demand harsh treatment and those who demand leniency. As a result, it is probable that immediately after the victory the defeated state and its citizens will be treated harshly. But the state organisation may not be treated harshly enough because of a reluctance to treat individuals harshly, while the individuals may suffer more than they should, in spite of that reluctance. In due course, therefore, a reaction will probably occur in favour of greater leniency to both and the harsh policy will be totally abandoned. The defeated country will then be presented with an opportunity for further attack, as well as with the weapon of moral indignation of those who have been wronged, while the victorious countries are likely to become obsessed with the diffidence and shame of those who may have done wrong.

The growth in England after 1919 of this feeling of shame and of sympathy with Germany is well described by Mr. McCallum: it is, indeed, his central theme. He attributes it to the growth of pacifism, to the spread of the Labour Party's faith in socialism and the German workers, to the inability of the Radicals to think in military and strategic terms, to internal psychological reasons, an element of Anglo-Saxon masochism, even, and to the Protestant ethic.<sup>2</sup> There is, no doubt, much substance in these arguments, but what is not explained is that such sentiments need cause to feed on and grounds

<sup>1</sup> I take the argument in this paragraph from K. R. POPPER, *The Open Society and Its Enemies*, Vol. I, p. 244. It will be clear that I am indebted to Dr. Popper's notes on this subject for the development of my argument.

<sup>2</sup> MCCALLUM, *op. cit.*, p. 64, pp. 88-93, and pp. 112-7.



for their encouragement. It can be shown quite plainly that their growth was not due to German propaganda: they were articulate before Germany had any power or influence in the matter, before even the Treaty was signed.<sup>1</sup> Is it not probable that they can all be traced back to the initial failure to distinguish between the limitation of the (conventional) rights of the German State and the infringement of the (natural) rights of its individual citizens?

If, when peace broke down, as is so often claimed,<sup>2</sup> it was because the Treaty had not been observed, it was the strength and complexity of these sentiments (and not only in England) which ruined the execution of the Treaty's provisions. The political and moral conviction that the coercion of Germany was not justifiable prevented the enforcement of German disarmament.<sup>3</sup> Equally, on the other hand, the inclusion in the Treaty of eventual equality of disarmament, a result of the original confusion of thought, became a major factor in creating international disunity and was most detrimental to the root problem of security. The growth of these sentiments also explains the bitterness of the reparations arguments and the wearisome process, which began almost at once,<sup>4</sup> of making things easier for Germany at the expense of bitterness with France. The determination and bitterness of France herself sprang from the same failure on the part of the French to solve the problem of treating the Germans in one way and the German State in another. It was the path of belated and limited political appeasement of the Weimar Republic, after the original short-comings in this respect, which led to Locarno, that treaty which both gravely weakened the already sadly undermined League and encouraged the already widespread belief that the German leopard had changed its spots for ever.

Is any useful purpose served, however, by distinguishing between the Treaty itself and the failures met with in its enforcement? It can be shown that the Treaty was the best instrument possible in the circumstances. It is arguable that it was more just than indiscriminate criticism between the wars has led us to believe. It can even be agreed that the Settlement collapsed because the Treaty was not, in the event, observed. These considerations leave the main point untouched. The Treaty cannot be defended as the basis of a Settlement that was 'worth maintaining and could have been defended'. The conditions which hampered its execution were present before it was signed. The cardinal error from which those conditions arose was inherent in the Treaty. Nor can it help to claim that the error was inevitable, the failure understandable. It must be established, to refute this argument, that the error was not committed or that the consequences claimed for it were due, in fact, to other circumstances.

It might, of course, be argued, especially in the light of experience

<sup>1</sup> *ibid.* pp. 86-8.

<sup>2</sup> *ibid.* p. 78.

<sup>3</sup> *ibid.* p. 63.

<sup>4</sup> *ibid.* p. 75.

since 1945, that, even if the original mistake had been avoided, it would still have proved impracticable to maintain a fine distinction between the treatment of the power-organisation of the German State and the treatment of its citizens. No doubt, to preserve the distinction would have been most difficult: many things are in the political world and we must learn not to expect too much. But above all, in answer to this case, the reply must be that speculations as to what might have been must not deter us from attempting a correct analysis of what did happen and why it did so.

## 4

There was one other element in the Settlement which was to be almost as fatal to the new European system as the failure to diagnose the German problem. Like the error in regard to Germany, the concept of self-determination was also written into the Treaty.

Once again, one of Mr. McCallum's points in defence of the Treaty is that self-determination could not have been avoided: the Treaty in this, as in other ways, adopted the best solution in the circumstances.

It accepted the principle . . . for all those nations of Europe which were clearly distinguishable . . . In doing so it was recognising the facts . . . It was the defeat of Germany and Austria-Hungary which permitted the [new] nations to establish themselves . . . [Its work] was in a sense negative. It did not try to alter this state of affairs . . . Self-determination was an existing fact before the Conference met . . . It may therefore seem that to discuss whether self-determination was a foolish policy is absurdly academic. One may feel that there is a certain failure in the processes of reason when men discuss whether the only possible policy is reasonable or not. But this may be over-stating the case. . . .<sup>1</sup>

But, if it is accepted that the recognition of the Succession States was unavoidable, it must be pointed out that this was one thing while the acceptance of the principle of self-determination was another. Mr. McCallum's frequent equation of these two processes is not sound.

The phrase 'new states' as applied to the Succession states was a misnomer.

Only two were new, Czechoslovakia and Poland, and of these Poland was a resurrection, while Czechoslovakia was a revival and extension of the old kingdom of Bohemia, a very ancient element in the European polity . . . In Vienna, Budapest, Prague, Bükarest, Belgrade there were governments of sorts,

<sup>1</sup> *ibid.* pp. 67 and 79.



going concerns which practical statesmen could recognise. Like sensible men the peacemakers took their stand upon them. . . .<sup>1</sup>

There could be no quarrel with this estimate if that were all the statesmen had implied when they recognised the 'existing facts'. If they had, reluctantly perhaps, merely accepted the existing governments in these capitals and absorbed the regulation of their practical demands in the new international system, that would indeed have been an empirical and common-sense decision. Nor can the mistake committed be said only to lie, as Mr. McCallum suggests,<sup>2</sup> in not 'positively forbidding them to exercise full state power, . . . [in not establishing] a great Danubian Confederation.' It will be readily agreed that the enforced creation of a Danubian confederation would not have been practical politics. The real error lay not in accepting the existence of the Succession states nor in the failure to insist on their confederation. It consisted in the fact that, as Mr. McCallum elsewhere implies,<sup>3</sup> the Treaty 'accepted and consecrated', if it did not impose, self-determination as a principle, nationalism as a creed. Mr. McCallum's failure to distinguish at all clearly between accepting the facts of politics and proclaiming the force of these principles would be difficult to understand were it not due to his original confusion of aim, that confusion which earlier led him to emphasise that the Treaty was the best practicable instrument in the circumstances when he should be attempting to defend it as inherently just.

In spite of this confusion, however, it is clear that Mr. McCallum considers that acceptance of the principle itself was also unavoidable; and there are good grounds for sympathy with this view. An excellent general account of the development of the ideas of self-determination and nationalism has recently appeared.<sup>4</sup> It describes the increasing precision of political terms, and the steady strengthening of these two conceptions in particular, throughout the nineteenth century. The various strands are indicated which went to make up the enormous and adaptable force which these ideas had come to possess in the period we are discussing: the French contribution of the nation as popular will, the German theories of the nation as the soul of the people and of the people as members of the race, the Italian affirmation that each nation is an autonomous and free political personality. In more detail, Dr. Popper<sup>5</sup> has illustrated the tremendous contribution of Fichte, Hegel and their successors to the principle of the national state: the political demand that the territory of every state should coincide with the territory inhabited by one

<sup>1</sup> *ibid.* p. 80.

<sup>2</sup> *ibid.* p. 79.

<sup>3</sup> *ibid.* p. 101.

<sup>4</sup> DON LUIGI STURZO, *Nationalism and Internationalism* (Roy Publications, New York; London, Dennis Dobson, 1946), chapter I.

<sup>5</sup> *The Open Society and Its Enemies*, vol. II, pp. 47-56.

nation. Nor could it be expected that such a development would be confined to the realm of political thought. Such ideas are the result of political situations and inevitably become actual political forces in themselves, as is illustrated, for example, in the establishment by Masaryk of Czechoslovakia. The authors of the Settlement could have been excused if they had regarded the strength of the self-determination appeal and decided that they could not but accept its achievements.

But, as we have seen, they did more than this. They not only accepted, they 'consecrated' the principle. They did not merely recognise its existing achievements but took it upon themselves to consolidate its positions, to proclaim its validity, to extend its already widespread influence in the political world.

Perhaps, it will be argued, even this attitude on their part was unavoidable in view of the hold the idea had already obtained. That may be so; but we are not concerned to blame the authors of the Settlement nor to defend them, only to establish as accurately as may be the elements which were embodied in the Settlement. Whether it was unavoidable or, as we may suspect, due to the hold which the idea obtained upon the statesmen themselves, confusing them, as it has confused Mr. McCallum, when they looked to the problem of the Succession States, the fact remains that the principle of self-determination was one of those elements, self-determination as a principle that was admirable in itself and eminently worthy of application whenever practicable.

Can the Settlement which embodied this view be regarded as a system that 'was worth maintaining and could have been defended'? Mr. McCallum's anxiety for his thesis leads him, now, to a defence of the principles of self-determination and nationalism. 'Nor was it absurd', he claims,

to suppose that self-determination had many merits. An organised State requires a sense of community amongst the majority of its citizens. The more homogeneous that majority is the safer and more fortunate the State . . . Yet all countries cannot expect to be as fortunate as Sweden. [It is on this principle that] Western Europe has disposed itself in the last hundred years . . . It was not unreasonable to apply the same principle to Central Europe . . . It is also an error to suppose that nationality is merely a nineteenth-century conception . . . The problem of nationality was also of great concern to William Wallace and Robert Bruce, to Bertrand Duguesclin and Joan of Arc. It was to no nineteenth-century fantasies that they devoted their arduous lives. Be it noted, too, that they did solve their problems.<sup>1</sup>

<sup>1</sup> McCallum, *op. cit.*, pp. 80 and 83.

It would be no exaggeration to say that this defence is riddled with misconceptions. In the first place, to confound nationalism with the patriotism of Joan of Arc is to err, as Don Sturzo points out,<sup>1</sup> not only linguistically but also politically. It must surely emerge quite clearly in due course that, among the many causes of the failure of the Settlement and the outbreak of the second World War, we must include

the misconception of nationalism as fervent and active love of one's own nation whereas . . . it was already possessed by an egoistic spirit, inoculated with an inhuman theory that has divided peoples and emboldened tyrants.<sup>2</sup>

Then, even if this distinction is denied, if nationalism is said to be no mere nineteenth-century fantasy, if the unfortunate distortion of the theory in that period, as described by Don Sturzo, is ignored, it can hardly be claimed that it is sound politics to look back to years of internal strife and European war for a principle which should guide us in the establishment of future international peace. Such an achievement, in any case one of extreme difficulty and vast dimensions, will not be furthered by an inability to avoid past errors. Above all, however, it is useless and highly dangerous to accept the desirability of any principle without some regard for its practicability.

Of all the factors which made self-determination a pernicious and retrograde influence in post-Settlement Europe, this disregard for its impracticability is most pronounced. Mr. McCallum recognises this problem himself: 'All countries cannot expect to be as fortunate as Sweden.' There are two great difficulties, he says,

in regulating nations on a basis of self-determination. The States must have frontiers, and in Central Europe they contained large and intractable minorities. This is unfortunate and is no doubt regretted by all concerned. But it all began a long time ago. [It] left Central Europe a mass of sadly intermingled races speaking different languages . . . Failing federation, there were three possible measures to be taken, extermination . . . another Völkerwanderung, or an attempt to safeguard minority rights . . . The third was the only possible policy, and so it was adopted . . . It was feebly carried out. . . .<sup>3</sup>

It was feebly carried out because it was practically impossible to ensure its consistent application. Already in 1919 criticism of the Treaty centred, among other things, on the failure to apply self-determination.<sup>4</sup> President Wilson had soon to speak to the Italian people on 'the dangers of taking nationality too seriously [and] that

<sup>1</sup> *Nationalism and Internationalism*, p. 5.

<sup>2</sup> *ibid.*, pp. 53-4.

<sup>3</sup> McCallum, *op. cit.*, p. 81.

<sup>4</sup> *ibid.*, p. 59.

is not remembered as one of his successes'.<sup>1</sup> On the other hand, some attempt was certainly made to apply the principle even though, in solving some minority problems, an equal number of new minority problems was created. 'In many cases', as Mr. McCallum himself admits, 'the doctrine of self-determination was too rigidly applied and the French had to fight hard for some concessions to military needs.'<sup>2</sup> Confusion of criticism was, consequently, soon apparent. The accusation that 'merely linguistic and ethnographic considerations won the day [was] answered by the other criticism, no less frequent, that great injustices were done to large populations.'<sup>3</sup> And both these criticisms, of course, had their foundation in fact. Mr. McCallum may be right in claiming that 'to say that the statesmen at Paris were obsessed with nationality is absurd';<sup>4</sup> but such a confusion of criticism, such an admixture of too rigid application in some cases and of inapplication in others, can only have been the result of a failure to see, in good time, that the principle of self-determination was itself invalid in the circumstances, and that any attempt to apply it would expose inherent and inevitable contradictions.

This is not to say that the principle itself need be condemned outright as false in theory and vicious in its effects, at all times and in all circumstances. It is in the nature of such principles that the attempt to assess them as good or bad in theory is gratuitous and unnecessary. They derive their value or their viciousness only from their effects: their effects they acquire from the circumstances in which they are applied. They will have liberal or totalitarian leanings, will be valid or invalid, will work for good or will work for evil, according to these circumstances and the motives for which they are proclaimed.

In the Europe of 1918, with linguistic groups for ages so densely packed that it was quite impossible to disentangle them, when the principle itself had acquired, in the circumstances of recent European experience, dubious, dangerous and violent associations, its 'consecration' by the Treaty of Versailles, and the partial application of it in the Settlement, could not but be an invitation to future disturbance. The attitude then taken towards the principle may well have been unavoidable. That its consecration was effected and was due to much confusion of thought can scarcely be denied. That the resulting Treaty and Settlement were 'worth maintaining and could have been defended' is open to much doubt.

## 5

A third major misconception came to underlie the Settlement. The German problem and the principle of self-determination made the Settlement unstable in the beginning; a widespread belief in the

<sup>1</sup> *ibid.* p. 84.<sup>2</sup> *ibid.* p. 163.<sup>3</sup> *ibid.* p. 84.<sup>4</sup> *ibid.* p. 84.

practicability of universal and eternal peace weakened the efforts to preserve it. Among other causes, the failure of the League was due to 'the general feeling that it had been established in order to end all wars and not to wage them'.<sup>1</sup> Instead of the establishment of a peace system and the provision for war against any attacker of that system, its object came to be seen as that of ending all war. There arose a demand that governments, by universal disarmament, should end war for ever, and end it now.

Unlike the other misconceptions, this fallacy was not written into the Treaty. The authors of the Covenant were quite clear that they had to begin somewhere, that

the many could restrain the few . . . All that was asked for . . . was a recognition of the fact that war was now a world problem . . . [They were not] people who thought that aggression could be conjured away without force . . . The Covenant was quite precise about this matter . . . Indeed, the disregard with which the . . . most solemn engagement which a British Government had ever signed [was treated] is a remarkable event in our political history . . . It seems absurd to pretend that the League was only a forum . . . and not an instrument for the enforcement of peace. . . .<sup>2</sup>

But the fact remains that it developed quickly and established a strangle-hold on the future of the League. There was, from the beginning, inadequate faith in the value of the League and a fundamental controversy as to its function. As soon as it was faced with real issues the framework which was established to preserve the Settlement, and achieve its peaceful modification, deteriorated at once; and the deterioration proved to be non-stop.

If we ask to what was due this ignoring of the Covenant, this steady reduction of the chances of maintaining the Settlement, no easy answer will suffice. Mr. McCallum believes that the Settlement could have been defended and that

the vagueness [which led to its collapse] lay not in the Covenant but in the policy of our own and other Governments in the development of the system.<sup>3</sup>

It would, indeed, be unhistorical and unsound to believe that the Settlement was bound to fail and that the League was doomed from its inception. The object of diplomacy is to surmount problems, whatever they may be; a characteristic of statesmanship is that they are surmounted. When the necessary documents are eventually released, some criticism of the failure of the statesmen to preserve

<sup>1</sup> POPPER, *The Open Society and Its Enemies*, vol. I, p. 243.

<sup>2</sup> MCCALLUM, *op. cit.*, pp. 130-2.

<sup>3</sup> *ibid.*, p. 132.

the Settlement, and to modify it peacefully, will undoubtedly be substantiated. But it is easy to diagnose Europe's trouble between the wars as the bankruptcy of statesmanship. It is unsound to defend the statesmanship of the authors of the Settlement and to denounce that of their successors. No defence of the authors will alter the basis on which they built. No criticism of the governments which succeeded them will be valid if it ignores the intractable nature of the problems which, because they were unseen or because they were fostered by the Treaty, passed into the post-war period. Any shortcomings which will be revealed in the execution of the Settlement will also be found to apply to its authors. Inadequate and superficial thought on political matters, and resultant confusion of political aims, may well be the fundamental limitation that will emerge: and in these matters statesmen seldom rise much above their contemporaries.



## THE CRISIS OF PARLIAMENTARY GOVERNMENT

CHRISTOPHER HOLLIS, M.P.

It is not only the Socialist Government, it is the whole Parliamentary system which is on trial. We might as well recognise the fact. No purpose is served by concealing it. When the Socialists were only in office and not in power it took them two years to bring the whole country to a complete economic collapse. We were told at the election to wait and see what happened when they were in power as well as in office. We have waited and we have seen, and what has happened has been almost exactly the same. After two years the country has once again been brought to a similarly complete economic collapse.

The Conservative might perhaps derive from this the lesson that it had now been most amply demonstrated that, whether it be through the inherent absurdity of Socialist principles or through the quite abnormal incapacity of Socialist leaders, the Socialists are certainly not fit to govern. And so indeed it has. There may indeed be a certain formal coherence in what one can only presume to be the private thesis of Mr. Crossman and his friends that the incapacity of individual leaders is no proof of the unsoundness of Socialist principles. That is true enough. It is certainly true that the present crisis has not been caused by any demonstration of the impracticability of schemes of nationalisation as such. None have been actually put into operation except those of the Bank of England and the mines and neither of these, it must in fairness be admitted, have had time as yet to prove themselves either practicable or impracticable. The egregious follies of Dr. Dalton are private follies for which the Socialist theory cannot be justly held to blame. On the other hand, if the present crisis cannot be justly blamed on Socialism in the abstract, yet it can to a very large extent be blamed upon the timing and pace of Socialist experiment. Whether in the abstract certain industries are better nationalised or not may well be debated, but what is certain is that the strength and working capacity of the civil service is strictly limited, and that if all its energies are diverted from their primary task of administration and taken up on working out these new schemes of nationalisation, then the country — not merely the nationalised industries but the whole country — falls into chaos. The thesis of Keep Left is essentially an academic thesis, projected into a real world that is not in the least like an academy. The real objection to pressing forward with the nationalisation of



iron and steel at the present moment is, as practical nationalists are themselves very well aware, that there simply is not the staff to carry it through — much as the practical objection to a foreign policy of co-operation with the Socialist countries of Europe is that there do not happen to be any such countries.

Therefore it is quite clear that Socialism of the Attlee brand is breaking down and that Socialism of the Crossman brand is not at all likely to take its place. Nor is there any sign that the Communists will — at any rate in the immediate future — be even challengers to the Parliamentary Socialists. What may be the names of our future rulers is as it may be. They may even be called Socialists. But it is certain that they will not pursue a Socialist policy, for such a policy is no longer possible.

But such truths carry only a modicum of comfort to a realistic Conservative. It is certainly true that many of those who were once the enthusiastic followers of the Socialist party are now largely turned from them in disillusionment, that some have turned from them altogether and that others, who remain with them, remain not in hope but in a spirit of bitterness, determined that, however bad things may be, yet at least they will prevent the 'old masters' from ever coming back. The Gallup polls' tale of the mounting unpopularity of the Government is certainly so far a true tale. But those polls are taken on the question of satisfaction or dissatisfaction with the Government. The sad fact that we must face is that there is plenty of evidence of dissatisfaction with the Government but, until the municipal elections, no evidence at all of a swing-back to Conservatism. The bye-elections showed a decreased Socialist poll but no Conservative gains. Who was gaining? The truth was undoubtedly an ugly and dangerous truth. No political party was gaining. What was gaining was apathy and cynicism, the spirit of 'a plague on both your houses', the spirit of 'we're finished anyway. Neither this nor any other Government can get us out of this mess. There's nothing to be done'. Do the municipal elections mark a turn?

Like all political moods, this is produced by a mixture of weariness and reason. If we are to dispel the mood, it is necessary first to appreciate the degree of reason in it. You cannot fight that which you do not understand. It was one of the more sensible doctrines of the Marxians that each economic system had a particular political framework in which it expressed itself and that, when that economic system passed away, then its political form must inevitably die with it. On this thesis there is much to be said for it that Parliamentary democracy is the political expression of a capitalist society, and, that, when capitalism passes away, Parliamentaryism must inevitably die with it. Parliament can only work through the party system — in one form or another — and the party system can only

work, first, if you have a homogeneous society, and, if there is general agreement that the function of government is severely limited. In such a society Liberals and Conservatives — or whatever be the names of the parties — can take their turns at power. The rise and fall of parties is a convenient means of satisfying the public appetite for change without the inconvenience of revolution. At the same time the continuity of the national life is preserved in spite of changes of government — partly because the parties only differ on one or two issues and allow those issues to be taken as settled after they have been before the electorate for a reasonable time, partly because vastly the greater part of the national life is untouched by politics altogether.

Now it is certainly the ambition of many — perhaps of the majority of Socialists — merely to substitute the Socialist for the Liberal party and then to continue the old party system in the old way. Many Socialists are adroit Parliamentarians, and adroit Parliamentarians are naturally reluctant to destroy the game of their skill. Besides most Socialists are almost insanely conservative about everything that is not directly in front of their nose. A man who thinks that there is one sovereign remedy for all the ills of the world is almost always abnormally blind to the perpetual Heraclitan flux which is constantly changing the very nature of the questions by which he is faced. The question is not whether the Socialists want the Parliamentary system to continue, but whether it will continue.

We have to face the fact that in our lifetime — in the third of a century since the outbreak of the 1914 war — the party system has broken down every time that it has been put to a strain. It has broken down three times, in 1916, in 1931 and in 1940, and there is every sign that it will now break down a fourth time. Of the last thirty-three years we have spent twenty of them under national and only thirteen under party governments.

We are of course told that war-time coalitions are quite different, that it is both natural and right that politicians should sink their party differences in the hour of national danger. Certainly it is natural and right, but that is hardly the point of the argument. The point of the argument is that the party system was a political system suited to a capitalist economy. Since 1914 the capitalist system has been breaking up. One effect of its break-up has been a couple of gigantic world wars. Another effect has been the incompetence of the party system to deal with the problems that are thrown up.

That incompetence has been by no means accidental and personal. The fundamental bases of a civilisation, whatever they may be, must be taken for granted if that civilisation is to have any stability at all. In the full capitalist society the capitalist basis was unchal-

lenged because politicians took it for granted and did not attempt to challenge it. They contented themselves with controversy about society's pinnacles and its flying buttresses. Thus in a capitalist society of the full tradition politicians would not have concerned themselves with arguments about coal targets. They would have said: 'If people want coal, they will demand it. The intensity of their demand for it will settle the price that they are prepared to pay for it. The miners can have such wages and conditions of labour as enable them to produce coal at the price which the public is prepared to pay. If they do not produce coal at that price, then the public will not buy their coal.' With such arguments they would have left the problem confidently and carelessly to settle itself.

Now it is important to note that nobody, whether he calls himself Socialist or anti-Socialist — nobody except just possibly my friend, Sir Waldron Smithers — advocates an attitude of mere *laissez-faire* towards our basic industries today. The Conservatives, whether they have a policy or not, are at the least insistent on claiming that they have a policy. Whether these problems are to be solved by nationalisation or not, at least everybody is agreed that they are to be solved by some form or other of Government action.

This means that, whatever the precise pattern of the society of the future, at least the bases of that society will be bases that have been established by deliberate Government decision in a way in which the bases neither of our nineteenth-century society nor of any previous English society of the present millennium were established. By far the closest parallel to what is happening today in England is to be found in the Norman Conquest and the policy of William the Conqueror, when, as Kipling put it, England was being 'hammered, hammered, hammered into line'.

It does not particularly matter to this argument whether this England of the future is going to be the classless society of the Socialist ideal or whether, as I myself think more likely, it is going to be of a managerial pattern. All that my argument demands is the admission that its bases are going to be consciously Government-imposed. And this means that, however these problems may be settled, yet that settlement must be generally accepted if we are to avoid complete chaos. Whatever else we may do, we cannot chop and change every five years about the fundamental method of organisation of our mines, our railways, our iron and steel industry and so on.

Therefore some agreement, overt or tacit, will have to be reached about the limits and nature of Government action and that agreement generally respected. The doctrinaire may demonstrate to his own complete satisfaction that, as the case may be, no industry should be run by the State or all industry should be run by the State. But,

however brilliant the demonstration, it is not a matter for demonstration *in vacuo*. There are in practice the blood of forty million men and women to complicate the issue. In practice the major difficulty is that roughly half the nation wants the one solution and the other half wants the other — and yet neither the one system nor the other can work unless it is supported by the general confidence of the nation. There is the dilemma, apparently insoluble, formally, as I have stated it, obviously insoluble but which yet most obviously has to be solved if this country is to avoid a complete dislocation and collapse. Future elections may shift slightly this way or that the proportions between the two philosophies. What purpose will be served by that? These shifts of proportion will not heal the fundamental division, and it is the division which must be healed if the country is to survive.

It is of course possible to argue that 'somehow or other this problem will be solved by one sort of compromise or another, and then there is no reason why we should not go on with the party system in this new sort of society exactly as the Victorians went on with it in their society'. In Victorian England it was formally possible for Parliament at any time to have nationalised the mines or delivered the most fundamental challenges to the property system, but in fact it was certain that it would not do so. So it may well be that after a time the fire of enthusiasm for nationalisation will have spent itself. Certain industries will remain nationalised. Certain industries will be under some form or other of managerial control and sensible people will understand that, whether the managers manage the industry nominally in the name of the State or nominally in the name of a private and now important enterprise matters little and will turn their attention to more serious issues. Why should not things go on like that as smoothly as they went on under the Victorian system? Because under the Victorian system the functions of Parliament were so limited that it was physically possible for Parliament to do its work and it was physically possible for a Member of Parliament, if he took the trouble to do so, to understand substantially the whole of the business on which he had to legislate. Today it is quite literally impossible for more than a handful of members to understand any particular measure on which they vote. It is impossible that a body so ludicrously unqualified should for long keep any real control over the Governmental machine, even as it is equally impossible that any but the most exceptional Cabinet Minister will under modern conditions keep any real acquaintance with the business of his department. Where then resides the real authority? At present it resides nowhere, and we are slipping into mere chaos. But, if we are to avoid the fate of the Gadarene swine, it is necessary to take out of the hands of the political Parliament functions which it is manifestly incompetent to perform. The

managerial power must be made legitimate and it must be made responsible to a council of each appropriate industry and perhaps to a general council of industry, bodies which will be capable of accepting a real responsibility in such matters in a way in which the old territorial Parliament can never accept it. The attempt to preserve the legal fiction of a total Parliamentary sovereignty over the modern State cannot possibly lead anywhere except to the total collapse of Parliament.



## THE ELUCIDATION OF LIFE

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THE study of life pertains both to biology and philosophy. In the past and at present, academic specialisation has sundered these two branches of knowledge, and they have pursued different and sometimes alien courses, though interacting constantly, both to each other's advantage, and to each other's detriment. There is no reason, however, to regard biology and philosophy as differing other than in the degree of generality of their subject matter. Biology is taken to mean in this essay knowledge bearing in any way on living things; philosophy is regarded as knowledge bearing on being in general.

At the outset of any inquiry into the conclusions that can be accepted on biological problems, the inquirer is confronted by the comparatively narrow but significant divergences that characterise the various schools of biological theory, and the extremely wide and serious differences between the schools of philosophy. Kant's uneasiness at the disunity of philosophy still troubles us today, even though we are unable to feel so complacent about the unity of science.

Before any satisfactory treatment of the fundamentals of biology can be made, it is necessary to examine the various philosophies that have moulded biological thought or are relevant to it, to ascertain their cogency, and to discover what has brought about their divergence. It is obviously impossible to attempt this in a short review; what can be done is to indicate the field of inquiry, and to suggest lines along which the various problems might be resolved.

Dealing first with Western philosophy up to the time of the Renaissance, it is not necessary to refer to more than the three groups of philosophies that may be termed materialist, Platonic and Aristotelean respectively. All three of these philosophical systems have influenced biological notions profoundly, although their impact has varied according to the era. While it is true that biological speculation is not absent in the Ionian philosophers and the atomists and is of considerable importance in Plato, it is in Aristotle that the study of life receives its fullest expression in ancient times. In the various works of Aristotle and Theophrastus, the foundations were laid of the systematic study of plant and animal parts, the theory of relations between these plants, developed later into the theory of homology, the principles of biological classification, the elucidation of the process of reproduction and the problem of spontaneous

generation, and the elements of plant and animal physiology. The whole system of biology as developed by Aristotle and his followers is naturally tinged deeply with the distinctive tenets of Aristotelean metaphysics, especially the notions of substance and accident, matter and form, and the four causes, efficient, final, material and formal.

Aristotle's biology was elaborated in so much more detail than that of his predecessors, that until the Renaissance and long afterwards, his influence on biology persisted, even when his philosophical views fell into disfavour.

In addition to those who would now be termed pure scientists, there were also the practical men, the agriculturalists Varro and Columella, Dioscorides the herbalist, Hippocrates and Galen the physicians, and collators like Pliny. These supplemented the store of empirical fact supplied by the philosophers, and sometimes introduced philosophical notions of their own. The points of divergence between Aristotle and the medical schools is of considerable historical importance, and occasioned controversy as late as the eighteenth century on such subjects as heredity.

In the first millenium of the Christian era, philosophy as represented by the neo-Pythagorean, neo-Platonic and Patristic writers tended to favour Platonic notions instead of Aristotelean. Biological speculation continued, though obviously not a matter of general interest. Generally speaking, discussions of biological problems, together with questions of pure philosophy, have to be extricated from theological works dealing, for instance, with the exegesis of the first chapter of Genesis. Until the entire mass of Patristic writings has been examined more thoroughly from a philosophical and biological point of view, it will not be possible to give a just estimate of its importance in the development of ideas. St Augustine's influence, however, can hardly be exaggerated, especially on the Augustinian wing of medieval scholasticism, where the notion of *rationes seminales* received elaboration at the hands of several of the Franciscan schoolmen.

The philosophy of nature of the Cappadocian fathers appears to have persisted as part of the philosophic tradition of eastern Christendom; its influence may be detected in Russia in such a recent figure as Solovjev, to whom Berdyaev and Lossky owe so much. Solovjev rebutted the pessimism of the Russian anti-teleological Darwinian nihilism of his day, by the vision of the final incorporation of the entire realm of nature into one universal theandric organism, the Mystical Body of Christ.

With the beginning of scholastic philosophy, although Platonic influences were strong at first, as with the realists of Chartres, later philosophers were nearly all Aristotelean. Of these, one of the

earliest and most important was St Albert the Great, an acute philosopher and probably the greatest biologist since the time of Aristotle. St Albert developed Aristotelean biology and made many original observations of his own. He managed to extract sense from the obscure Latin tract *De Plantis*, derived via Arabic from an abridgment of Theophrastus' works on botany, and prefaced by a synopsis of Aristotle's theory of the vital principle or soul. The importance of St Albert's work for later writers still awaits elucidation. His philosophy was perpetuated till the seventeenth century at least, especially by the Albertine philosophers of Cologne.

The Thomist and Scotist Aristotelian philosophies arose after the pioneer work of St Albert, and were developed by a continuous series of commentators well into the eighteenth century. Thomism is also widely studied today. As with the Patristic writers, the biological notions of Thomists and Scotists have often to be extracted from their theological treatises, and although it is known that St Thomas, for instance, made a careful study of Aristotle's theory of generation, no comprehensive study has yet been made of the biological ideas treated by scholastic writers of these two schools. It is probable, however, that neither school influenced the development of biology as profoundly as the later nominalist schoolmen following in the footsteps of William of Ockam. Nominalist criticism, foreshadowing in so many ways the analytical philosophies of today, exposed the inadequacy of a great deal of the philosophy of the time, and lent encouragement to an empirical approach to scientific problems. Roger Bacon and Raymon Lull also played a part in moulding scientific ideas, the former by his emphasis on experiment, and the latter by his efforts to develop logical inference into a mechanical art. Most important of all, however, were the Latin Averroists of Padua and Bologna, with their knowledge both of Aristotle and the Arabic scientific writers. Late Italian scholasticism provided the birthplace for most branches of modern science, including physics, geology, zoology and botany.

• In Italy during the sixteenth century, not only was Averroism in vogue, but also Alexandrian Aristoteleanism, and the highly individual anti-scholastic Aristotelean philosophy of Cesalpino, probably the most highly accomplished biologist of his day, who wrote at length on the question as to whether the soul could be regarded as co-extensive with the organism, on the nature of the distinction between living and non-living things, and on biological classification; his scheme of plant classification was highly regarded by Linnaeus.

Suarez, the great scholastic philosopher of the sixteenth century, was widely read in the following century, and traces of his influence appear in such figures as Jung, the virtual founder of modern plant morphology, and Glisson, the Cambridge medical writer.

A misleading picture is often presented of the state of philosophy in the seventeenth century. After the Council of Trent, there was some diminution in the number of scholastic schools, but it is quite erroneous to think of Aristoteleanism as going into decline. Thomism and Scotism each continued to develop in France, Germany, Italy and Spain. Lullism persisted in Spain and Averroism in Italy. Nominalism was still supported in Paris, and even by some philosophers at Oxford. Suaresian philosophy flourished in the Spanish universities. New schools of scholastic philosophy even arose in the Protestant universities of Germany, and these were followed largely at Cambridge. The definition of life given by Ray in his *Historia Plantarum* — *unio seu conjunctio animae cum corpore* — is found in almost identical language in the *Physiologia Peripatetica* of Magirus of Marburg, an edition of whose work was issued by the University Press at Cambridge in 1642.

Anti-scholastic Aristoteleanism is represented both by Catholic and Protestant writers. An extremely interesting school of English Catholic philosophers was constituted by Thomas White, Sir Kenelm Digby of Oxford and John Sergeant of Cambridge. White, and especially Digby, were both very interested in biology. The latter, a foundation member of the Royal Society, criticised current theories of heredity resembling what was later known as pangenesis, and also the vitalist theories of a specific *archeus* or *vis formatrix* as postulated by the Louvain neo-Platonist van Helmont.

Meanwhile, the classical revival brought with it the resuscitation both of Greek materialism and Platonism, using the latter term in a very broad sense.

Atomic materialism as developed by Democritus, Epicurus and Lucretius, was applied to biological problems, as to other branches of natural science, and introduced the notion that the complexities of living systems could be explained as simple resultants of the interaction of material particles. During the Middle Ages, with the interesting exception provided by Nicholas of Autrecourt, atomism remained latent. Gassendi, however, brought it back in full force, and its utilisation by Boyle and the chemists soon established it securely as a fruitful scientific hypothesis. Physiological studies introduced it from chemistry and physics to biology, and it has remained since as a fundamental element of biological theory.

Platonic philosophies have played an extremely intricate role in the shaping of biology. Beginning with the Italian Platonism of Marsilio and Pico della Mirandola, and passing thence to the Louvain neo-Platonist van Helmont, the Bohemian Platonist Marci, and the Cambridge Platonists Cudworth and More, there were a succession of significant impacts on biological theory. With all these writers there is a tendency to replace the secondary causes of

Aristotle by the immediate action of God, acting either directly, or by some intermediary demiurge such as the Plastick Nature of Cudworth taken over by Ray, or by immaterial agents in each organism such as the *archeus* of van Helmont. The concept of immaterial entities in all living things instead of or in addition to the Aristotelean soul educed from the potency of matter, became widespread in the following century. Van Helmont, and his follower Wedel, influenced the vitalist Stahl, whose *anima* is very similar to, and is equated with, the *archeus* of van Helmont. Vitalism, under many guises, was widespread in the eighteenth century, and was only ousted by the success of materialist explanations of physiological processes in the early nineteenth century. The immaterial entity of vitalism is variously described. Stahl retained the Aristotelean term *anima*, although the body of the organism was regarded, not as matter united to a form, but as a passive *instrumentum*. Needham supposed a *productive force*, Wolff a *vis essentialis*, Blumenback, a *nisus formativus*, Treviranus, a *vis vitalis*. Before the older vitalism became extinct, it received an accession of strength from post-Kantian idealism, whose impact on biology was similar to that of Platonism in several ways.

As far as present-day biology is concerned, the most significant philosophical development of the seventeenth century was the system of Descartes, which soon obtained a foothold in many of the universities. It had staunch supporters at Cambridge, where Le Grand's redaction of it was read. Descartes attacked the possibility of ascertaining final causes, and rejected the scholastic notion of substantial form. The organism became for the Cartesian a machine, a viewpoint closely corresponding to that of the atomists, and leading on to the materialism of the *philosophes*. At the hands of Descartes's disciple Malebranche, the demolition of the Aristotelean system proceeded still further, with a brilliant attack on the theory of secondary efficient causation. It is interesting to note the interesting parallel between the Platonic and Cartesian attitude to efficient causation. Van Helmont's position on this point is almost identical with that of Malebranche, both writers attributing what were usually regarded as examples of secondary efficient causation to the direct action of God.

Books on the history of science commonly dwell on the importance of the English empirical philosophers Bacon, Hobbes and Locke, in establishing the basis of experimental method and inductive argument. This influence has been much exaggerated. The principal influence of these writers was in the field of pure philosophy, particularly on the eighteenth-century French philosophers. Scientists seldom read books on scientific method, and there is little evidence of any profound effect of the empiricists on biology.



A far more important philosopher, as far as eighteenth-century biology was concerned, was Leibnitz, whose concept of the monad was closely paralleled by the extraordinary theory of preformation, or evolution as it was then called, according to which every organism before its development must have pre-existed as a germ. This phase of biology, associated in particular with the names of Haller, Bonnet and Spallanzani, hardly survived the opening of the following century.

The next important philosophical development affecting biology was the complex set of philosophies deriving ultimately from Kant. The critical side of this movement was not so important biologically, although Schleiden, the early nineteenth-century German botanist owned his indebtedness to the Kantian critiques. It was the idealist implications that intrigued contemporary biologists, particularly the expositions of these by Schelling, Goethe and Oken. The branch of biology most affected was morphology. The notion that biological organisms are constructed of parts which reappear in other organisms or in different regions of the same organism under a different guise yet are all fundamentally equivalent or homologous, is a widespread concept today whose idealist origin is easy to demonstrate. The Platonic notion of the archetype also fed the stream of morphological speculation that ran turbulently throughout the last century.

While idealist philosophies dominated biology in the first half of the nineteenth century, Darwin was to turn the tables in favour of materialism and what may be called evolutionism in the latter half of the century. It has already been mentioned that materialism had a considerable appeal for physiologists, and this philosophy became extensively diffused through the writings of the eighteenth-century French materialists like Holbach and the nineteenth-century materialists such as Büchner. Darwin's theory of natural selection provided the materialists with a weapon for attacking the popular teleological arguments for the existence of God drawn from the evidence of the adaptation of organisms to their environment. At the same time, the theory of morphological equivalence elaborated by the idealists was taken over by the evolutionists, materialised, and explained as a simple consequence of common ancestry.

Darwin's influence, in addition, transcended biology and invaded philosophy, where it took root in such evolutionist philosophies as that of Lloyd Morgan, where an empirical finding in biology was raised to the status of metaphysical necessity.

Aristotelian philosophy reached its lowest ebb in the nineteenth century, and where still followed, was quite divorced from scientific thought.

Today, the emphasis has shifted again. Biological idealism has lost a great deal of ground. It survives among the more traditional morphologists, but only under an increasing fire from the analytic-

ally minded. Materialism has possibly declined, at least as a comprehensive philosophy of biology, but there is a tendency to speak of a greater decline than has in fact taken place. Dialectical materialism, as developed by Marx and especially by Engels, has recently been advocated as a philosophy of science, especially in Russia, and to a lesser extent, in this country and France. The political entanglements of this philosophy rather confuse any attempt to estimate its intrinsic value, but, although much has been written on its scientific utility, it does not appear to have contributed much more than an emphasis on the dynamic aspect of natural events.

The revival of Aristotelean philosophy, especially as represented in the writings of Gilson and Maritain, has led to the production of a number of attempts to devise a new Aristotelean philosophy of biology, especially in France. The neo-scholastics, however, appear to suffer somewhat from antiquarianism, and it is still too early to discern whether or not they have made any important contribution to the philosophy of biology, beyond bringing to light the important work of the medieval scholastics.

By far the most promising philosophies for present-day biology are the various analytic philosophies associated in particular with the names of Moore, Russell and Wittgenstein. Till now, their impact on biology has been extremely slight, Woodger's *Axiomatic Method in Biology* constituting an important, but very isolated, exception. In addition to these philosophies, a few biologists have shown interest in the phenomenology of Husserl, and many more in Whitehead's philosophy of organism. Whitehead has re-emphasised the importance of regarding the organism as a unity in itself, not a mere conglomeration of parts. This point of view, also stressed in Smut's philosophy of holism, has already inspired several works on the philosophy of biology, such as that by Agar. It is difficult to avoid the impression, however, that Whitehead's philosophy has as yet hardly been digested by biologists, and the attempts made so far to erect a philosophy of biology on this basis can only be regarded as tentative.

Till now, the only philosophies that have been considered have been the Western philosophies deriving ultimately from Greece. Any adequate treatment, however, of these problems can no longer ignore the Oriental philosophies, especially those of India. The Arabic and Jewish philosophies are so closely akin to those already mentioned that there is no point in listing their several contributions. It may be recalled, however, that Ibn Rushd (Averroes) was one of the most potent forces shaping the development of ideas among the late Italian scholastics, who were also the first scientists of the modern period.

Of the philosophies of the Far East, it is not necessary to deal with

any beside the Indian systems. Buddhist philosophy in China and Japan and Taoist philosophy in China do include an indigenous development of philosophic ideas, but there are comparatively few points of view not represented in the more fully elaborated Indian systems.

Among the six classical schools of Brahman philosophy, the Sāṃkhya, Vaiśeṣika and Nyāya schools are of most importance for biology. These, in contrast to the Vedānta school, are pluralist, affirming the eternal existence of a multitude of life principles or souls, known variously as *ātman* or *jīva*, yet agreeing with the latter in asserting that transmigration of these souls takes place. The disjunction between body and soul, so characteristic of Brahman philosophy, and the assertion that the soul is a substance (*dravya*) existing of itself, not just the substantial form of the organism as with Aristotle, runs closely parallel to the various vitalistic philosophies of biology of Platonic origin that have already been considered. The soul in the pluralist Brahman philosophies corresponds very closely with the *anima* of Stahl; similarly, the notion of vital force (*adr̥ṣṭa*) in the Vaiśeṣika school, invoked to explain all biological processes whose physical basis was not apparent, is closely parallel to the *vis vitalis* of the eighteenth-century vitalists. In southern India, where the Vaiṣṇava, Śākta and Śaiva schools were principally developed, a similar affirmation is found of a plurality of souls.

Turning now to the Buddhist philosophies, especially the Mahāyāna school, a very different picture is presented. In contrast to the Brahman schools, the Buddhist philosophies display a radicalism, which shatters every entity postulated by the former into a succession of concourses of *dharma* atoms, each existing but for a moment, yet able to determine causally the atoms ensuing. According to this view, there are no substances, no wholes, and no souls. The notion of transmigration loses most of its content. The concept of causality, however, becomes of outstanding importance, and is analysed in great detail. There are distinguished for example, physical causation in general, the causation operating between sense objects and sense organs in perception, causation operating on the psychological level between mental states, causation arising by the action of sentient entities, and extremely important, *sabhāga hetu*, the causation resulting in a temporal succession of similar momentarily existing *dharma* atoms. This last form of causation is invoked to cover the duration in time of any unchanging object, likewise to cover the duration in time of any object which, while changing, remains in some ways the same, as in the development of organisms. Other causal relations too are recognised, but these are mostly concerned with the Buddhist notion of transmigration and the attainment of *nirvāna*.

Only very brief mention need be made here of two other Indian philosophical systems, the Jain and the Cārvāka. The former is chiefly interesting for its epistemology, but it also suggests that, in plants, more than one soul may be present. The Cārvāka school is so similar to Western materialism that a separate description would be redundant. Life is regarded as a mere result of the concourse of material particles; the soul is either denied or only admitted as something which arises with the generation of an organism and ceases with its death.

Having now sketched in extremely brief outline the various philosophical systems that have impinged on biology, it is necessary to consider along what lines their very divergent interpretations of life can be resolved. To do this, it is advisable first to make a logical analysis of the content of biology proper, in order to discover what exactly is the status of the biological concepts considered by the philosophers.

The first operation of biological investigation is observation of facts about organisms. Having collected data, it is then possible to make inferences, to generalise and to establish relationships. These latter processes are logical, and, for their judicious accomplishment, require the most efficient logical techniques available. Curiously enough, the most highly elaborated logical methods have so far been almost completely neglected by biologists, and the many fundamental contributions to modern logic that have followed the publication of Whitehead and Russell's *Principia Mathematica* have been almost completely ignored. Among biologists, as already noted, Woodger stands almost alone in his tentative use of symbolic logic in the analysis of biological concepts. There is no need to exaggerate the differences between traditional and modern logic, or more correctly, the extent of the development that has occurred from one to the other. The great value of modern symbolic logic is its analytic keenness, its extreme precision, and the elegance of its processes. Complex relations can indeed hardly be handled by the older methods without the latter proving cumbrous in the extreme. Moreover, three-valued logics admitting three possibilities — true, indeterminate, false — instead of the classical two — true, false — are extremely useful in coping with scientific questions where the data may be insufficient to lead to definite conclusions. It is possible, also, that the  $n$ -valued metalogics still in the process of development, and without any obvious immediate application, might prove valuable in handling even more complex problems.

With these preliminary remarks, an outline will now be given of the logical structure of the various branches of biology. As already stated, sense data about organisms provide the starting-point of all biology, though it is only very rarely that scientific importance

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attaches to single individuals. The exception concerns the type specimens of newly defined biological species, and is a matter of convenience rather than principle. The first step in biology proper is analytical, the splitting up of an organism into parts, either gross parts such as leg, nose or tentacle, organs such as heart or stomach, tissues like bone, muscular tissue or wood, or microscopic parts like the cell, nucleus or chromosome, or even biochemical parts such as proteins, starch or water. Analysis into parts, though allocated respectively to morphology, histology, cytology and biochemistry, may be regarded from a logical standpoint, as one process, even though many of the parts recognised may be, and in fact, will be, constituents of other parts.

The next stage in biological inquiry concerns the relating of the parts so derived, both *inter se* within the organism from which they were derived, and also with the parts of other organisms. Thus, a morphological relationship is declared when the term leg is applied both to the hind limb of man and the hind limb of a dog. A different relationship is proclaimed when the term leg is applied to both the fore and hind limb of a dog, and a very remote relationship is established when the same term leg is used for the limbs both of dogs and insects. Morphology consists in establishing and relating classes into which parts may be allocated, and the obvious instrument for handling these is the logic of classes developed in symbolic logic. It is true that morphology has been very much affected in the past by considerations derived from Schelling, Goethe, Oken and other idealist philosophers, but this influence can be rejected without detriment to biological theory.

Morphology may, therefore, be regarded as the logical treatment of the class categories derived by analysis of individual organisms. Taxonomy, or classification, is but one line of treatment coming under morphology understood in the widest sense. It consists in the comparison of organisms in respect of degree of difference, or in logical terms, the discovery of the number of morphological class categories they have in common. By arranging organisms so that those exhibiting the largest number of common morphological categories come together, the familiar hierarchy of biological species, genera, families and orders is derived. In this connection, however, two points must be noted. Firstly, there has been a tendency to suppose that taxonomy must be phylogenetic, that is, express the evolutionary ancestry of the forms it treats. This may happen, but it is not essential, for the details of phylogeny are in many cases either unknown, or too complex to be profitably incorporated into a scheme of classification. Secondly, many systematic units recognised today are not defined by a particular set of common characters, that is, by the coincidence within the taxo-

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onomic units of certain morphological class categories in common. Instead, they are often merely collective groups established on grounds of convenience for organisms with no obvious similarities to neighbouring large groups.

Relations may next be studied between organisms and their environment. The relations between any biological species or a population comprising an association of species and the particular place which they inhabit are studied by plant geography. If, however, this relation is studied, not with regard to a particular habitat, but with regard to a kind of habitat, that is abstracting from the particular location of the environment, then the study is known as ecology.

There are two commonly recognised branches of biology which can also be treated along the lines suggested above. Genetics is the study of the relationship between the morphological class categories of organisms linked by the parent-offspring relation. The study of evolution is allied. It comprises the study of the relation of taxonomic units, derived as shown above, in the light of the parent-offspring relation as in genetics, but over an extended period of time.

It will be noted that the above outline makes no mention of physiology, which is frequently regarded as penetrating beneath the purely formal relationships studied by morphologists. In common practice, physiology is regarded as a distinct side of biology, though several other branches of biology may be treated along physiological lines, morphology as in the physiology of development, or genetics, as in physiological genetics.

Physiology, however, cannot be regarded as a fundamentally different branch of biology. The mere fact that it frequently deals in terms of physics and chemistry distinguishes it in no way from gross morphology, the class categories considered are merely smaller. The use of experimental methods is also no distinguishing factor, since these merely modify the relations of the part of the organisms either *inter se* or between themselves and the environment, and so enlarge the number of biological relationships available for study. There is further no essential distinction to be derived from the fact that physiologists study the sequences of biological events in relation to preceding events, which they may themselves arrange experimentally, for by so doing, they again merely enlarge the field of relations to be investigated. A so-called physiological explanation of a biological process usually consists in showing that a certain physical system, whose constituents behave in the same way as in any other physical system, will, under specified conditions, produce the manifestations typical of the biological process concerned.

This extremely brief outline of the logical structure of biology reveals it as a plexus of logical relations of varying degrees of

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complexity, grounded on observations of living things. No mention has been made yet of biological hypotheses, mainly because it is quite possible to represent the whole of modern biology without employing them at all. Furthermore, since hypotheses lack a strictly logical foundation, they can hardly be profitably discussed logically. Hypotheses can only be disproved by contradicting facts; they can never be logically established unless they can be shown independently to be strictly logical inferences from other experimental data. Concordance with a large body of observational data is not an adequate ground for accepting an hypothesis.

Coming now to the philosophical interpretations of biological data, and to the problems arising from the divergences between the philosophical systems, and from the misunderstandings that have arisen between biologists and philosophers, it is necessary at the outset to repudiate the timid suggestion that the discordances between biology and philosophy could be resolved by so delimiting their respective fields that they do not overlap. It is sometimes suggested that, since science deals with appearances, and philosophy with ultimates, there is no need for the latter to fear the onslaughts of the former. This position is indefensible. Admittedly the subject matters are different, but they are not disjunct. Philosophy presents certain propositions relating to living things. In this respect, its domain coincides with that of biology, although its total field is admittedly different from that of biology.

A rather more subtle attempt to resolve discordances along these lines seems to be implicit in *Les Degrés de Savoir* of Maritain. Dealing with physics, this author suggests that the discrepancies between philosophical and physical interpretations of physical data can be resolved by assuming that physics is concerned, not with *ens reale*, but with a mental construct pragmatically justifiable but ontologically invalid. Such an attempted solution does not take into consideration the fact that scientific statements vary widely in their logical status. In particular, a distinction should be drawn between experimental data and generalisations and relationships derived from these on the one hand, and hypothetical notions on the other. To most scientists, this distinction is appreciated in principle, though Eddington declared against it. To non-scientists, however, the distinction must necessarily be extremely difficult to make out, since no differences in verbal presentation are commonly used in scientific papers to discriminate between the two. A scientific writer will talk in the same way about a conveniently devised thousand dimensional space whose real existence he does not believe in, as he would about three-dimensional space which he believes to exist in reality. In physics, the distinction between strict inference from data and hypothesis is often extremely difficult to ascertain, and a philosopher



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might well be excused for being unable to establish it. In biology, however, hypotheses play a less important role, and the distinction can be more easily made.

It should have become apparent from the foregoing that when the data of biology are subjected to logical analysis, there is but little room for divergent interpretations. It is when biologists and philosophers wish to attain a more fundamental knowledge than that of logical patterns, that difficulties arise. Logical description admits of variations but not of inconsistency; philosophic explanations till now have involved both.

To put this matter more clearly, questions relating to living things may be subdivided into three classes, which may be termed respectively the *essential*, the *existential* and the *teleological*. The first inquire as to the properties and behaviour of organisms, and of their interactions between themselves and with their environment. The second ask how it is that organisms exist at all; the third inquire to what end biological processes are directed.

Answers to *essential* questions are the simplest to give and are provided by a logical analysis of biological data. There is a grave danger, however, that instead of remaining content with logical inference from the data, other notions will be introduced in an attempt to enrich the logical pattern of biology by explaining its generalisations with various philosophical concepts. It is here that discordance arises, since different philosophies employ different and sometimes mutually contradictory concepts, and since these are postulated and cannot be inferred from the data, inconsistent philosophies of biology are engendered, between whose claims adjudication is impossible.

There is only one solution to this impasse, and that is the rejection of hypothetical philosophic explanations *in toto*, reserving only those that can be inferred logically from the data. This is not a rejection of explanations as erroneous, but as unknowable. Expressing the matter in terms of 3-valued logic, most philosophic propositions put forward to explain biological data are neither true or false, but indeterminate.

Proceeding thus, we may reject all the plethora of immaterial entities that have invaded biology from Platonism, the vital forces, morphological archetypes and their kindred, also the idealist concept of homology derived from the German Transcendental idealism of the early nineteenth century. It is quite possible to sweep away all the unsubstantiated implications of plant and animal morphology, and to treat the whole question of homology as an exercise in the logic of relations. Similarly the Aristotelean, materialist and Brahman concept of life as a plurality of substances is suspect to say the least.

Causality, or more precisely, secondary efficient causality, repre-



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sents a further invasion of biology by a philosophic concept that has played an extremely important role in Aristotelean and Western philosophy generally, also in the Buddhist philosophies of India. In the account given above of the logical structure of biology, the word cause was not used, for it is unnecessary in answering any *essential* biological problem. The notion of causal interaction is redundant in biology, at least its necessity has not yet been demonstrated. Biological occurrences can be described adequately in terms of sequences of events correlated in various ways, and these can be described best by means of the logic of relations.

It is well known, of course, that Hume criticised the notion of secondary efficient causation from the philosophical side, also Malebranche, who had biological phenomena much in mind. An earlier and very interesting attack on this notion was made by the Islamic philosopher al-Ghazali, while one of its most important critics was van Helmont, the Louvain biologist and chemist of the sixteenth century. He discussed the parent-offspring relation, and denied that the parent is the *causa efficienter efficiens* of the offspring; this according to van Helmont is God. He calls the parent the *causa dispositiva efficiens* of the offspring, and emphasises that it can only be termed a cause equivocally.

It should be unnecessary to add that in every case where a philosophic concept has been used unwarrantably to explain biological data, it is quite unreasonable to assume that the philosophy concerned is of no use to biology. Even an unjustified explanation has usually been based on a previously unsuspected logical relation which can be used as a basis for fresh advances in biological analysis.

Turning now to the two remaining classes of questions which may be posed on biological matters, the *existential* and the *teleological*, it is easy to show that answers are far harder to give, and that in many cases no answer at all is possible. To the question how is it that organisms exist at all, it is difficult to deny, in view of the obvious contingent existence of organisms, that they are maintained in existence by some principle existing of itself, to wit, God. Further than that it is hardly possible to go. To the questions, why God should maintain living things in existence, why others should lapse into extinction, why they should be possessed of the particular properties that distinguish them, and to what end, if any, their various activities are directed, neither philosophy nor biology can give any answer, as Descartes emphasised against the Aristoteleans of his day, who insisted on their ability to attain knowledge of final causes.

At this point, it is apposite to inquire very briefly into the possible relevance of Christian theology to these problems. The explicative claims of biology and philosophy have been discussed and rejected, since they cannot be grounded logically in the data to which they



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refer. This objection cannot be urged against theological propositions, since the ground of these, a Divine Revelation, is different, though it is possible, of course, to reject the ground.

It would be out of place to enter here into the question as to whether or not Divine Revelation has occurred; it is merely necessary to indicate what relevance, if any, for the understanding of life the system has which asserts such an occurrence. This is easily done. Christian theology claims to answer questions which the philosophers' claims to answer have been rejected above. It was Descartes who showed that the claims of biologists and philosophers to comprehend final causes was presumption based on loose thinking. A craving, however, for such knowledge is universal. From a logical standpoint, theology can be rejected, or rather it can be ignored, since it derives from a foundation which is other than that of natural knowledge. If it is ignored, it is impossible to deny that the explanations so eagerly sought by biologists and philosophers that they excogitate them illegitimately for themselves, are placed outside the realm of possibility. Leaving theology aside, description alone is possible to students of life, and the satisfaction which this will engender will be akin to that of a librarian meditating on his catalogue. Biology and philosophy only furnish a pattern of relations, beautiful in the sense that a mathematical theorem is beautiful, but no more.

As to the ways in which Christian theology claims to answer *existential*, *teleological* and even *essential* questions relating to life, this is far too large a subject to broach in a general survey such as the present. Nor can the occasions and reasons be discussed for the conflicts that have occurred between theologians and biologists on biological matters. It must suffice to state shortly that misunderstandings have occurred chiefly through some theologians asserting, as dogmatic truth, propositions admitted by others not to be of the essence of Revelation, and through biologists asserting as true, propositions that were only hypothetical.

The more stringently the logical texture of biology is analysed, the fewer explicative ideas it is seen to contain. From the viewpoint of natural knowledge, the final achievement of any analysis of biological data is a pattern of logical relations. Should natural knowledge represent the term of all knowledge, here we must rest content, or at least resigned; if, on the other hand, the Christian Revelation can be accepted, perhaps then the pattern of biological relationships may be rendered meaningful, and its underlying purpose discerned.

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## BOOK REVIEWS

C. J. CADOUX: *Philip II and the Netherlands: An Essay on Moral Judgments in History*. Butterworth, 18s. net.

Few periods of history have attracted more specialists in controversy than Spain in the sixteenth century. Few subjects have greater need to be treated in a spirit of disinterested historical inquiry. So any enthusiasm aroused by the arrival in the field of such a meticulous scholar as Dr. Cadoux must be qualified by the avowal on the publishers cover, that 'his book will be welcomed by many who have been alarmed to see the Protestant case... apparently going by default'.

The sub-title of the book indicates the central theme of this essay. Dr. Cadoux not only defends the right of historians to pass moral judgments on historical characters and events (and on other historians); he considers it their duty to do so. In this forthright attitude, Dr. Cadoux appreciates that difficulties are plentiful.

It cannot be pretended that Dr. Cadoux has resolved the difficulties of this position in subsequent chapters on the struggle in the Netherlands, the Inquisition and the personal characters of Philip II and William the Silent. He realises that some allowance must be made for the ideas of the age, for example that religious unity was considered to be a *sine qua non* of civil stability, that persecution was to a large extent a corollary of this conviction, that the killing of a body was of smaller consequence than seduction of a soul. 'Yet no complexities', Dr. Cadoux significantly calls them, '... will suffice to shake our conviction that it is a bad custom to torture men, ... or to deny them the right to worship God and to shape their beliefs about Him in the way they think best' (p. 160). No doubt admirable sentiments by present day standards; but have they any relevance to the interpretation of a struggle in which they would have been rejected by all religious leaders and statesmen except a man as far in advance of his age as William the Silent? Could the old Whig fallacy in fact have been more explicitly stated?

Once Dr. Cadoux's thesis is grasped — and the clarity and force of his writing leaves no room for doubt — his book becomes monotonous because his judgments are predictable. To cite only one case, the cruelty of the Inquisition is held to invalidate the term 'Golden Century'; but one looks in vain for any mention of the world of Cervantes and Lope de Vega, of St. Theresa and St. John of the Cross, of El Greco and Velasquez. But Dr. Cadoux would probably agree that his book, based as he says on nothing more than secondary sources, is more an exposé of the extravagances of Catholic historians than an attempt to shed fresh light upon the times. It will certainly strengthen the conviction of those who believe that the function of a historian is to understand and explain, not to chastise and avenge.

K. B.

FRANCIS MACMANUS: *Boccaccio*. Sheed and Ward, 10s. 6d. net.

Mr. MacManus endeavours to give us a new interpretation of the first European novelist, and in this he is not over-convincing. Boccaccio of recent date has been the subject of several major biographies in English and on the basis of scholarship and exactitude, the author of this latest is well behind Mr. Chubb and Mr. Carswell. This biographer is, in fact, somewhat severe towards scholars as a class, and is frank enough to disavow for himself the authority and training of scholarship. Perhaps he feels that Boccaccio comes more to life when portrayed by the enthusiast, and Mr. MacManus's style is nothing, if not exuberant.

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and orthodox figure of this medieval world. Therefore more stress is laid upon the details of his life, recounted with a flamboyancy which may attract some, but certainly repels the present reviewer. The works other than the *Decameron* in the vulgar tongue receive full attention, at the expense of the Latin works, which get somewhat contemptuous treatment. From an historical viewpoint, at least, we may regret the hasty dismissal of Boccaccio's *De Casibus Virorum* which exercised so great an influence in the early days of the Renaissance. However, we do get a good picture of Boccaccio as a man of his time, who assembled in himself that strange mixture of virtue and of vice, the passing of which some today may well regret. If Mr. MacManus lets his imagination run riot (as well as his style), there is at least vividity in his treatment, and the subject of this biography will, of course, always attract the men of the West — even in our 'progressive' and 'educated' world.

T. D. W.

E. W. F. TOMKINS. *The Approach to Metaphysics*. Kegan Paul, 12s. 6d. net.

This is a short work which purports to save philosophy from the philosophers — or at least from the alleged obscurity and unreality with which the jargon of the professional has enveloped it. The first part consists of an analysis of the author's personal approach to metaphysics through the theory of perception, and these chapters are the best test of his own contribution to his science. Mr. Tomkins states, rather than analyses, his 'realist' views, and the nature of the work prevents him from going deep into his subject. He avoids difficulties, and for a layman who, without much background, holds certain presuppositions (and there is no reason why he should not) Mr. Tomkins has served some purpose. To the specialist, however, he has nothing new to give and it was not, perhaps, his intention to do so.

There is indeed much cant upon the necessity of philosophic speculation and knowledge. One may justifiably feel that philosophy is only suitable for the specialist, and the less 'general' philosophy there is the better, no matter what the viewpoint. Education of the W.E.A. type has its terrors and its dangers, and philosophy of that nature is worse than even history or 'science'. No one, indeed, is entitled to take philosophy seriously unless he is prepared to plunge through a morass comprising logic and psychology as well as philosophy itself.

The author's history of metaphysics is simple and concise, and avoids confusion by overlooking difficulties. One legitimate complaint we may make is that even from the author's own philosophic standpoint, Mr. Tomkins is rather childishly unsympathetic to the logical positivists, and fails to see the very real support Carnap, Russell and Wittgenstein give — undoubtedly *malgré eux* — to the cause advocated by the author.

T. D. W.

SIR JOHN PRATT: *The Expansion of Europe into the Far East*. Sylvan Press, 10s. 6d. net.

This volume represents the substance of a course of lectures delivered to Cambridge students in 1946 and 1947. Sir John gives us a brief and superficial account of the main currents of European expansion in China from the fifteenth century to Yalta; his title is therefore misleading to his public, and the explanation offered by the publishers is hardly sufficient.

Sir John confines himself largely to political narrative, and almost entirely relies on secondary sources. Of economics we hear really nothing, and even in comparison with Latourette and Williams, the book has little to offer. The vast biographical blurb predisposes one to expect more than the reader receives. Although in many parts his history does not rise above consular gossip, it may, however, give the headline knowledge which it is now fashionable to assume is of value to our budding bureaucracy.

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